



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

~~WORLD~~ HEALTH
PROGRAMMES IN SOUTH EAST ASIA
ENVIRONMENTAL SANITATION
NUTRITION
CHOLERA
BILHARZIASIS

PUBLIC HEALTH IN NON SELF-GOVERNING TERRITORIES

WORLD HEALTH ORGANIZATION

PALAIS DES NATIONS

GENEVA

The World Health Organization (WHO) is a specialized agency of the United Nations and represents the culmination of efforts to establish a single inter-governmental health agency. As such it inherits the functions of antecedent organizations such as the Office International d'Hygiène Publique, the Health Organization of the League of Nations, and the Health Division of UNRRA.

WHO had its origin in the proposal made at the United Nations Conference held in San Francisco in 1945 that a specialized agency be created to deal with all matters relating to health. In 1946 representatives of 61 governments met at the International Health Conference, New York, drafted and signed the WHO Constitution and established an Interim Commission to serve until the Constitution could be ratified by 26 Member States of the United Nations. The Constitution came into force on 7 April 1948; the first World Health Assembly met in Geneva in June 1948 and on 1 September 1948 the permanent Organization was established.

The work of the Organization is carried out by three organs: the World Health Assembly, the supreme authority to which all Member States send delegates; the Executive Board, the executive organ of the Health Assembly consisting of 18 persons designated by as many Member States; and a Secretariat under the Director General.

The scope of WHO's interests and activities exceeds that of any previous international health organization and includes, in addition to major projects relating to malaria, tuberculosis, venereal diseases, maternal and child health, nutrition and environmental sanitation, special programmes on public-health administration, epidemic diseases, mental health, professional and technical training and other public health subjects. It is also continuing work begun by earlier organizations on biological standardization, unification of pharmacopoeias, health statistics, international sanitary regulations and the collection and dissemination of technical information including epidemiological statistics.

* * *

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RECENT AND FORTHCOMING MEETINGS

1949

19 21 September	Panel of Experts on the Revision of the Questionnaire for Trusteeship Territories and the Standard Form for Non Self Governing Territories Geneva
19 24 September	WHO Expert Committee on Plague first session Geneva
26-28 September	WHO Regional Committee for South East Asia second session New Delhi
26 September 5 October	WHO Expert Committee on the Unification of Pharmacopoeias fifth session Geneva
10-20 October	WHO Expert Committee on Venereal Infections third session Washington D C
12 15 October	WHO Regional Committee for the Eastern Mediterranean second session Geneva
12 20 October	WHO Expert Committee on Venereal Infections Subcommittee on Serology and Laboratory Aspects Washington D C
24 28 October	Joint FAO/WHO Expert Committee on Nutrition Geneva
24 29 October	Joint OIHP/WHO Study Group on African Schistosomiasis first session Cairo
18 19 November	Joint OIHP/WHO Study Group on Cholera third session New Delhi
1 6 December	WHO Yellow Fever Panel first session Geneva
5 14 December	WHO Expert Committee on International Epidemiology and Quarantine second session Geneva
12 14 December	Joint ILO/WHO Expert Committee on the Hygiene of Seafarers first session Geneva

1950

6 January	WHO Executive Board Standing Committee on Administration and Finance Geneva
9 14 January	WHO Expert Committee on Habit Forming Drugs second session Geneva
16 January	WHO Executive Board fifth session Geneva
6-11 February	WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel first session Geneva
20-26 February	WHO Expert Committee on Nursing first session Geneva
February tentatively	Joint ILO/WHO Expert Committee on Industrial Hygiene first session Geneva
February tentatively	WHO Expert Committee on Health Statistics Subcommittee on the Definition of Stillbirth and Abortion
February tentatively	WHO Expert Committee on Health Statistics Subcommittee on Cancer
20 March tentatively	WHO Expert Committee on Health Statistics Subcommittee on Hospital Statistics
17 April tentatively	WHO Expert Group Meeting on Prematurity Geneva
20 April tentatively	WHO Expert Committee on Health Statistics second session
20-29 April	WHO Expert Committee on the Unification of Pharmacopoeias sixth session New York
8 May	Third World Health Assembly Geneva

MENTAL HEALTH

One of WHO's most difficult tasks is attempting to win acceptance of mental health as an integral part of the economic and social welfare of the world's peoples and as a sphere for international activity and co-operation. Psychology and psychiatry are comparatively new sciences; full recognition has not yet been accorded to the concept of the human mind as the principal unexplored territory of the present age or to the physiological, social and economic ramifications of mental health. It can therefore be readily understood why this part of the WHO programme has been the subject of some controversy, specifically in the case of the Economic and Social Council (Economic Committee, Ninth Session) discussions of WHO's proposed contribution to the Expanded Programme of Technical Assistance, proposals for which were accepted by a large majority at the Second World Health Assembly.

It is perhaps natural that medical and economic interests should place emphasis primarily on keeping man alive and productive. Those who believe that this is not enough, that a broader outlook is necessary, are

FIG. 1. EXPERT COMMITTEE ON MENTAL HEALTH, FIRST SESSION



Standing, from left to right: Professor A. C. Pacheco de Silva, Professor J. Hädlík, Dr G. R. Haggard (WHO), Dr L. Yü Lin Cheng, Dr M. V. Goindaswamy, Dr T. F. Rodger, seated: Dr W. C. Meigs (Chairman).

consequently faced with the problem of proving that mental health is a 'prying proposition'. Unfortunately this is somewhat difficult not only because of the dearth of statistical investigations but also because the effects of mental ill health are often not recognized as such or are concealed because of the social stigmata associated with mental disorders.

In well developed countries the economic implications of mental ill health are expressed in terms of man hours lost in industrial productivity and in the cost of treatment and other social services. The former is illustrated by an investigation conducted by the Medical Research Council of Great Britain which demonstrated that, in the factories surveyed psychoneurotic disorders caused a loss of productive time slightly greater than that due to the common cold¹. An example of the latter may be found in the US Veterans Administration mental hygiene clinics at which 14 500 veterans are seen 5 or more times each at a cost of about \$5.75 per patient visit. More important in this instance however is the estimation that without this outpatient treatment between 4 000 and 6 000 of these veterans would have to be confined to mental hospitals where under older methods of treatment they might have remained for from 3 months to 30 years at a cost of \$5.00 to \$10.00 per day².

In underdeveloped territories economic development is often jeopardized by psychological resistance to measures intended to promote physical health and socio-economic progress. It is necessary to break down this resistance through education and to apply present day knowledge of social psychology in an effort to avoid the maladjustments which may accompany industrialization of these territories.

The role of mental health in physical well being is gaining increasing recognition. Studies in psychosomatic medicine are revealing the psychological factors in many types of ill health including in addition to certain organic disorders proclivity to accidents and the epidemiology of habitual sexual promiscuity which is important in the prevention of venereal disease³.

The social significance of mental health is evident in all aspects of human existence. The success of human relationships of every type is dependent upon the mental health of the individuals involved and the effects of unsuccessful relationships are costly from the standpoint of economic losses as well as of human misery.

WHO has attempted to outline a programme in mental health which would include as many of these problems as possible and lay a foundation for future action. The Expert Committee on Mental Health has been given the responsibility of advising the Organization on ways and means of implementing this programme.

At its first session held in Geneva from 29 August to 2 September 1949⁴ this committee sought to formulate principles and recommendations based on mental health problems as they actually exist throughout the world—a practical approach which should lead to practical solutions. Its first consideration was the extreme differences among various countries in the level and scope of development of treatment facilities for all types of psychological disorder. Faced with disparities such as 5 000 psychiatrists and 700 000 psychiatric beds for a population of 160 000 000 in the United States as compared with not more than 10 psychiatrists and less than 2 000 psychiatric beds for a population of 450 000 000 in China, the committee was forced to conclude that it will not be possible within the foreseeable future to provide throughout the world therapeutic psychiatric facilities at the level already provided in the more developed countries, let alone the level at which the well-developed countries are aiming (1 psychiatrist per 20 000 of the population). The ultimate solution of mental health problems therefore lies in the *preventive* application of psychiatric knowledge, a field relatively untouched even in well-developed countries.

With this idea of prevention as a keynote the Expert Committee on Mental Health formulated certain principles upon which the future WHO mental health programme should be based.

1 Encouragement of incorporation into public health services of the responsibility for promoting the mental as well as the physical health of the community. This entails comprehensive training of public health officers in mental as well as physical hygiene and might lead to the development of a specialty of mental hygiene and a profession of public mental hygiene officer. Changes in the education of nurses and other public health workers would also be necessary. The committee recommends that each ministry of health should include a section devoted to mental health. It is not intended however that an attempt be made to turn public health officers into psychiatrists. Their task in mental health work will be more concerned with the recognition and eradication of factors in the community which are harmful to the healthy psychological development of individuals rather than to the treatment of the results of those factors.

The following took part in this session:

of center

D L YU LI Ch g P ovinc l Ment l Hospital T pek City F rmosa Chi
Professo J Hádík Direct Psych tuc Cl U versity of P lack & Ol m uc Czechosl ka
D W C M g Th M nge F nd t T pek K USA (Chairman)
D T F Rodger Prof so f Psych l Medici U lrs y f Glasg w Uni d K gd m
(R ppor)

Co-op & Mem

D M V G nd w my S per tende t Myso St te M t l l p t l B g l re Ind

D G R H gre ca Ch f M 11 H 1 h Secti a, W/O

2 Emphasis upon the therapeutic and preventive psychiatry of childhood The skilful treatment of minor psychological disorders in childhood has a positive preventive effect so far as adult psychiatry is concerned, and the application of preventive mental hygiene measures makes its greatest impact during infancy and childhood

3 Application to local problems of the best scientific knowledge available and of the most appropriate methods, rather than reproduction of techniques employed in other countries

4 Development of clinical psychiatry in all countries This is important not only because of its therapeutic value, but also because clinical psychiatry provides opportunities for teaching and research which in turn, may point the way to further applications of a preventive nature

5 Integration of mental health activities wherever possible with other WHO programmes and co operation with the UN and its specialized agencies (particularly UNESCO and ILO), and with non governmental agencies such as the World Federation for Mental Health⁵ The committee noted and made recommendations concerning WHO activities regarding alcoholism and drug addiction maternal and child health, international statistical classification of diseases injuries and causes of death, morbidity statistics venereal diseases and unification of pharmacopoeias It discussed in considerable detail the UN study on the prevention of crime and treatment of offenders

Among other matters concerning which the committee made recommendations are the following

1 *Education* Priority should be given to

(a) Recasting undergraduate medical education to ensure understanding of normal psychological development and of the origin and nature of common psychological disorders

(b) Education of public health workers The committee recommended that WHO sponsor in collaboration with an internationally known institute of public health experimental postgraduate courses in preventive mental health work for public health officers already in the field

(c) Special training for public health nurses

(d) The possibility of training facilities for specialist public mental health officers

In postgraduate psychiatric education a dynamic conception which would integrate biological psychological social and anthropological sciences should be stressed The committee specifically recommended that WHO assist in developing in each region a centre for postgraduate teaching of all members of the psychiatric team including psychiatrists

clinical psychologists psychiatric social workers psychiatric nurses and other psychiatric auxiliaries

2. *Collection of information* The committee recommended that WHO serve as a collection centre and clearing house for information regarding treatment facilities relevant statistics education legislation crime alcoholism and drug addiction and public attitudes as these relate to mental health

3. *Advisory and demonstration services to governments* It was suggested that a consultant be sent to any country requesting these services. The consultant would wherever possible collaborate with the local experts in surveying the needs of the country and outlining a plan of action. The Republic of the Philippines is the first country to request WHO aid in mental health^a

4. *Research* The committee recommended that WHO foster research along the following lines

- (a) Biological psychological and cultural determinants of personality
- (b) Relationship between individual personality and patterns of group behaviour and relationships
- (c) Effects of rapid changes of culture pattern on mental health and the means of preventing and mitigating any ill effects of such changes
- (d) The extent to which the incidence of psychosomatic affections is influenced by social economic and cultural factors and by individual characteristics and personality structure
- (e) Relationship between psychological disorders or states on the one hand and infective processes nutritional deficiencies and biochemical disturbances on the other
- (f) Etiology and treatment of psychiatric disorders

The report on the first session of the Expert Committee on Mental Health will be published after approval by the Executive Board in the *World Health Organization Technical Report Series*

^a See p. 3

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(f) Etiology and treatment of psychiatric disorders

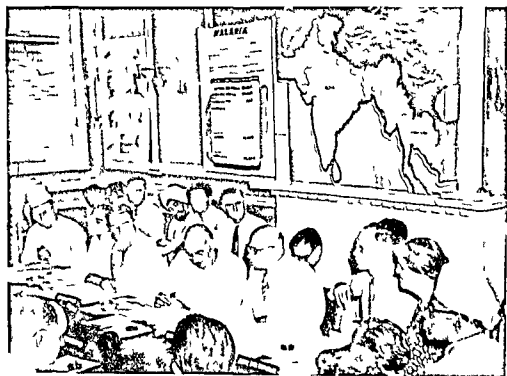
The report on the first session of the Expert Committee on Mental Health will be published after approval by the Executive Board in the *World Health Organization Technical Report Series*

NEW HEALTH PROGRAMMES IN SOUTH-EAST ASIA

The Regional Committee for South East Asia met, for the second time from 26 to 28 September 1949 at New Delhi¹. The general principles governing improvement in the health conditions of the population had already been discussed and agreed upon by the WHO expert committees and the World Health Assembly. Consequently the purpose of this brief session was not to study these principles again but rather to consider ways and means for implementing them and adapting them to the extremely variable conditions of the different territories.

The committee included representatives of Afghanistan, Burma, Ceylon, France, India, Portugal and Thailand. After hearing an account of the position in the various countries and examining the problems facing the

FIG 2 WHO REGIONAL COMMITTEE FOR SOUTH EAST ASIA SECOND SESSION 1



Seated at table from left to right: Dr Tha Mya (Burma), Mrs Aung San (Burma), Dr Faqir Mohamed (Afghanistan), Dr K. C. K. E. Raja (India), Dr S. F. Chellappah (WHO), C. H. Moore (WHO), Dr Martha M. Eliot (Assistant Director General, WHO), Sir Arcot L. Mudaliar (India).

A brief report on the first session appeared in *Chin. World Health Org.* 1948, 2, 224.
The list of delegates and observers taking part in the meeting is given on page 12.

FIG 3 WHO REGIONAL COMMITTEE FOR SOUTH EAST ASIA SECOND SESSION II



Seated round table beginning from left: Dr S Daengsang (Thailand), public writer Rajkumari Amrit Kaur (India), Dr K C K E Raja (India), Dr W G Wckremesinghe (Ceylon), a secretary, Dr Tha Mya (Burma), Mrs Aung San (Burma), Dr Faqir Mohamed (Afghanistan), S W R D Banda anaike (Ceylon), Chairman, Dr C Mani (Regional Director)

governments the committee took certain decisions with a view to solving these problems taking care to ensure that the countries of the region would derive maximum benefit from the aid offered by WHO. The committee convinced of the need for close co-operation—within the framework of WHO—between the member countries adopted joint solutions particularly with respect to the teaching and training of personnel. It drew up recommendations inspired by this spirit of co-operation the most important of which are summarized below.

Joint FAO/WHO Project

The committee welcomed with great satisfaction the joint FAO/WHO project for controlling disease and increasing food production³. This project is clearly of special interest to the countries of South East Asia where the effects of morbidity on agricultural production are acutely felt. The committee expressed the wish that several demonstration areas be established in South East Asia particularly in those countries which would be prepared to meet part of the expenditure involved. It invited governments to submit to the Regional Director proposals concerning areas suitable for these operations.

Malaria

During 1950 and 1951 a great effort should be made to intensify malaria control including in particular, the introduction and extension of the use of insecticides with a residual action.

In order to develop teaching facilities an essential factor in carrying out such a programme the committee proposed that courses in malariaology, similar to those contemplated at Singapore, be organized at the Malaria Institute of India New Delhi, and at the Malaria Field Training Centre, Ceylon. These courses would be open to nationals of all countries in the region. It is very important that the countries concerned have at their

FIG 4 WHO REGIONAL COMMITTEE FOR SOUTH EAST ASIA SECOND SESSION III



From left to right: Mrs Aung San, Pandit Jawaharlal Nehru, Dr Martha M. Elliot, Rajkumari Amrit Kaur, S. W. R. D. Bandaranaike.

disposal the insecticides essential for the control of insect transmitted diseases and that they receive the necessary equipment. The committee therefore recommended to Member States that they implement without delay the resolution of the Economic and Social Council of the United Nations and facilitate the supply of such material by decreasing customs tariffs, issuing export and import licences, etc.

Tuberculosis

The committee recommended that the countries of the region intensify considerably the BCG programmes at present being carried out⁴ and undertake vaccination in places where it has not yet been started. It requested the help of WHO in setting up a centre for the teaching and training of tuberculosis workers.

Venereal Diseases

The WHO demonstration team at present working in the Himachal Pradesh area⁵ in the foothills of the Himalayas, could serve as a temporary instruction centre. The committee recommended the governments of the

⁴ Ch on H. H. H. O. R. 1949 2 4 230 1949 3 24

⁵ Ch on H. H. H. O. R. 1949 3 94

region to send their venereal disease specialists to study control methods and laboratory techniques at the headquarters of the team in Simla

Pestilential Diseases

The committee welcomed the WHO projects for the demonstration of plague-control methods in India. With regard to smallpox it recommended the countries of the region to make vaccination and re vaccination compulsory and to ensure that the lymph used in vaccination is of good quality

Other Questions

The presence of a specialist regional adviser will lead to considerable improvements in the field of maternal and child health. Moreover recommendations made concerning problems of nutrition sanitation and housing bring new hope to the peoples of the region.

The question of medical supplies was also examined by the committee. In view of the tasks awaiting them and the considerable extension of health programmes it is certainly to the interest of the countries of the region to endeavour to make themselves partially self sufficient by developing within their own territory the production of substances used in disease control such as insecticides antibiotics vaccines galenicals synthetic drugs etc. Before any decisions are taken on this subject an inquiry should be conducted throughout the region. Consequently WHO was requested to send a small group of experts to survey the needs of the individual countries and their resources in raw materials technical personnel and institutions capable of assisting in the production of medical supplies. Finally the group of experts should ascertain to what extent the governments would be willing to make a joint effort. Priority should be given to the production of insecticides sulfonamides penicillin streptomycin and antimalarial drugs.

FIG 5 PATIALA HOUSE NEW DELHI
HEADQUARTERS OF THE WHO REGIONAL
OFFICE FOR SOUTH EAST ASIA



Part of this building has been placed at the disposal of WHO by the India Government

DELEGATES AND OBSERVERS AT THE CONFERENCE

AFGHANISTAN	Dr Faqir Mohamed
BURMA	Mrs Aung San Dr Thiri Mya
CEYLON	S W R D Bandaranaike (<i>Chairman</i>) Dr W G Wickremesinghe
FRANCE	C H Belle Médecin Colonel Bigot
INDIA	Rajkumari Amrit Kaur Dr A C A E Raja Dr P V Benjamin Dr O H Koenigsberger Dr C V Ramchandani Lieutenant Colonel J Singh
PORTUGAL	Dr F J C Cambournac Dr J M P de Figueiredo
THAILAND	Dr S Daengsang (<i>Vice Chairman</i>)
UNITED NATIONS	B Leitgeber
FAO	P V Acharya
ILO	K E Mathew
UNESCO	Dr H C Yin
UNICEF	T G Davies
WHO (Geneva)	Dr Martha M Eliot F Horine C H Moore
INDIAN RED CROSS SOCIETY	S B B Singh

The French and Portuguese delegates represented French India and Portuguese India respectively territories for the conduct of whose international relations they are responsible

ENVIRONMENTAL SANITATION FOUNDATION OF PUBLIC HEALTH

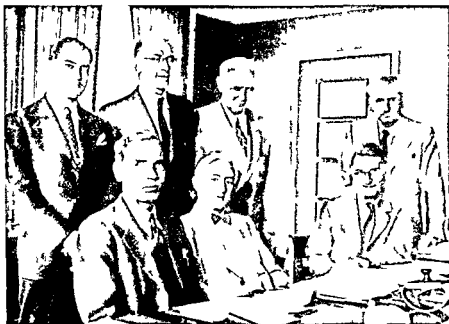
First Session of the Expert Committee on Environmental Sanitation

More than seventy years ago Dr M von Pettenkofer showed how in the city of Munich alone bad hygienic conditions and the resulting high death rate caused the loss of 3 400 000 working days each year Thanks to von Pettenkofer's efforts to improve sanitary conditions Munich at that time scarcely more than a small town was able to save 25 million florins over a period of twenty five years¹

Although in most countries sanitary conditions have considerably improved during the last fifty years, public health officers still have a tremendous task to perform Pollution of drinking water and inadequate disposal of wastes result in intestinal diseases such as typhoid the dysenteries cholera and the helminth diseases Contaminated foods such as milk spread brucellosis and certain forms of tuberculosis The presence of insect vectors particularly flies in overcrowded dwellings generally

¹ From Sgerist H E Introduction to Pettenkofer M von (1941) *The value of health to a city* Baltimore

FIG 6. EXPERT COMMITTEE ON ENVIRONMENTAL SANITATION FIRST SESSION



Standing from left to right: Professor R. De León, Professor G. Macdonald, S. Pincus (WHO), Professor V. Puntoni; seated from left to right: Professor K. Subrahmanyam, Professor A. Wolman (Chairman), Professor M. Petik.

maintains foci of trachoma and ophthalmia. Rats and fleas transmit plague; lice are vectors of typhus. In other words, sanitary conditions are largely responsible for the spread of infectious diseases, and measures for improvement of sanitation must form an integral part of any programme for their control.

For many years the physician and the drugs which he prescribed were considered the only effective means of combating disease. Such a conception of medicine is today out of date. The scope has been widened to include various aspects of preventive medicine, of which environmental hygiene is one of the essential factors. This development was stressed by Dr A. Stampar, President of the First World Health Assembly, when he stated that one of the tasks of WHO was "to contribute to the development of a new type of physician and specialized health worker, the type who will devote his services to those with impaired health, at the same time realizing that this is only part of the duties and work of the modern public health doctor."²

In the future, the work of the physician will be completed and assisted to an increasing degree by that of specialists such as nurses, social workers,

and sanitary engineers. These professions, whose role has for a long time been underestimated, have assumed and will assume, growing importance, they demand of those who devote themselves to them an increasingly high degree of technical training.

The importance ascribed to environmental sanitation is made evident by the large scale programme which the governments of various countries have undertaken with the assistance of organizations such as the United Nations International Children's Emergency Fund (UNICEF), WHO, and the Rockefeller Foundation, and by the establishment of a WHO Expert Committee on Environmental Sanitation. The task of this committee is to assist WHO in advising governments—particularly those who have to combat the great epidemic diseases—as to the most effective ways and means of improving sanitary conditions, it has also to suggest measures whereby interested countries may be assisted in training specialized technical personnel.

Role of Sanitary Engineering

During its first session held in Geneva from 12 to 17 September 1949,³ this committee examined among other problems the place which environmental sanitation should occupy in the health organization and programmes of the various countries.⁴ It particularly stressed the necessity for strengthening governmental organizations in this field by placing the sanitary engineering services on a sufficiently high level within the administrative hierarchy for them to have some influence on the conduct of operations. These services would be responsible for initiating and expanding sanitary works. In many countries they are at present split up into several departments (public works, housing, industry, etc.), this lack of centralization weakens them and diminishes their authority. In the committee's opinion the key positions should be held by specialized sanitary engineers capable by virtue of their training of making clear the vital necessity of

* The following took part in this session:

Members

- Professor R. De León, Dean, Engineering School, Central University of Venezuela, Caracas, Venezuela.
 Professor G. Macdonald, Director, Ross Institute of Tropical Hygiene, London School of Hygiene and Tropical Medicine, London, United Kingdom.
 Professor M. Letnik, Professor of Public Health Engineering, Institute of Hygiene, Zagreb, Yugoslavia (*Rapporteur*).
 Professor V. Puntoni, Professor of Hygiene, University of Rome, Italy.
 Professor K. Subrahmanyam, Professor of Sanitary Engineering, All India Institute of Hygiene and Public Health, Calcutta, India (*Vice Chairman*).
 Professor A. Wolman, Professor of Sanitary Engineering, Johns Hopkins University, Baltimore, Md., USA (*Chairman*).

Observers

- Dr R. P. Burden, Sanitary Engineer, Paris Office, International Health Division, Rockefeller Foundation, Paris, France.

Secretary

- S. Pincus, Chief, Environmental Sanitation Section, WHO.

³ The report on the first session of the Expert Committee on Environmental Sanitation will be published after approval by the Executive Board. In the *World Health Organization Technical Reports Series*.

assigning environmental sanitation its proper place within the national programmes for disease control

Great progress has already been made in several countries as a result of appointing sanitary engineers to key posts in organizations dealing with environmental sanitation. But in numerous other countries including the most developed there is a shortage of professionally qualified technicians for putting environmental sanitation programmes into action and supervising their execution. Professional training in environmental sanitation is therefore one of the subjects upon which in the opinion of the committee WHO should concentrate its efforts and lend its aid to governments. This aid might take various forms including

(a) granting of fellowships for study and for refresher courses to teachers of sanitary engineering and to sanitary engineers working in national public health services

(b) technical advice in the establishment or extension of the teaching of sanitary engineering

(c) provision of teaching materials and laboratory equipment to schools or institutes national or regional specializing in training and research in sanitary engineering

Education of the Public

The education of the public can play a considerable part in the improvement of public health—more so than in any other field. It is not merely a question of imparting elementary knowledge to the public but of inducing the whole population to adopt such habits as will eliminate the possibilities of transmitting disease. It is particularly children of school age to whom it is desirable to appeal inculcating in them habits of hygiene as an integral part of good social behaviour. Elementary hygiene should also be taught to personnel engaged in the production, handling and distribution of foodstuffs and drinking water as well as to persons such as transport and theatre employees etc. whose work brings them into contact with many people. In education collaboration with UNESCO might be very fruitful and the committee noted with satisfaction the liaison that has already been established in this matter between UNESCO and WHO.

Environmental Sanitation in WHO Programmes

One of the most effective means of demonstrating to governments and peoples the importance of environmental sanitation is the committee believes the integration of measures for sanitary improvement into WHO programmes. Whether it is a matter of maternal and child health (in Egypt and Texas fly control has already had a marked influence on infant mortality rates) or of controlling malaria, cholera or plague it is desirable that demonstration teams in environmental sanitation should work in conjunction with teams combating diseases.

The committee expressed the wish that environmental sanitation should be included in one of the joint FAO/WHO programmes combining disease control with agricultural development and that in one of the selected areas a demonstration of the various aspects of sanitary improvement should be carried out.

According to the committee WHO should in future encourage the adoption of standard methods of analysing water, milk and the chemicals used in sanitation practice, and develop an international standard technique and language so that information on this subject can be more easily exchanged.

INTERNATIONAL MEETING ON NUTRITION

Joint FAO/WHO Expert Committee on Nutrition

At the beginning of the last century Brillat Savarin wrote "La destinée des nations dépend de la manière dont elles se nourrissent".¹ The idea of a connexion between the health, vitality and development of the people and their nutrition is thus not new, but it is now more topical than ever. Recent scientific advances in agricultural production and in the manufacture of synthetic food factors such as the vitamins as well as the connexion discovered between certain diseases and food deficiencies enable a more direct approach to be made now to the problem of nutrition on the international plane.

International organizations have already for many years been trying to improve the food supplies inadequate both in quality and in quantity, with which millions of human beings have to be satisfied. In 1937 after having undertaken various work and investigations in connexion with nutrition the Technical Commission on Nutrition of the League of Nations Health Organization laid down the general principles for the composition of a sound diet calculated to ensure optimum growth and body maintenance.² During its 1938 session the Commission added some important conclusions dealing especially with the requirements for vitamins, inorganic elements, fats and proteins and with the milk requirements of infants, children and expectant and nursing mothers. A special committee of the Technical Commission which was given the task of studying nutrition in the East in tropical countries and in the colonial territories recommended that certain adjustments should be made in the sphere of agriculture to increase the production of protective foods.³

Quoted by Drummond J. C. Preface to Bacharach A. L. (1938) *Science and nutrition*. London, p. v.

These two quotations are extracts from the Report on the work of the Health Organization between June 1938 and April 1939 and on its 1939 programme which appeared in *Biological Bulletin* 1939, 8, 1.

This conception of a fundamental approach to the problem has since then been accepted as the basis of the objectives of the Food and Agriculture Organization of the United Nations (FAO) which is concerned with the production of foodstuffs and their distribution and consumption. FAO aids countries to develop the cultivation of the soil according to rational methods and to the special needs of each individual country.

For its part the World Health Organization is interested in the problem of nutrition because good nutrition is essential for optimal health. From the international standpoint the diverse aspects of the question are so interwoven that it is impossible to make any rigorous distinction between them. Consequently the two organizations intend to tackle them in close collaboration: a joint FAO/WHO committee has therefore been set up with the aim of studying questions of common interest.

This committee held its first meeting in Geneva from 24 to 28 October 1949³. Among the items on the agenda were projects for surveys of the nutritional requirements and the nutritional status of the people in different countries for the study of the etiology and prevention of endemic goitre and of certain other deficiency diseases and for research on diseases of nutritional origin which are still imperfectly understood.

Surveys of World Nutritional Needs

Surveys of nutritional status, calorie requirements and diets in the various parts of the globe as envisaged in the FAO/WHO programmes should make it possible to obtain a general idea of the world position in this connexion. The assessment of nutritional status for which WHO

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D F W Cl men Chief N trit Section, WHO

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is especially responsible can be made by the clinical examination of representative individuals by the determination of certain substances in the blood and possibly, by physical and biochemical examination of certain tissues. Methods of analysis and assay have been developed but the results of the various examinations need to be co-ordinated. The committee recommended that nutrition surveys should be carried out on a national scale. In order to complete them, to increase their value, and to facilitate comparison between the data collected in different countries it was suggested that standard questionnaires should be sent to governments.

Deficiency Diseases

The success which has crowned the efforts made in many countries to control diseases due to deficiencies of nutrients is extremely encouraging so that it is possible to contemplate the general application of certain preventive measures. The case of goitre and that of certain vitaminoses are particularly striking.

Endemic goitre The incidence of endemic goitre in the world is not known. Scientific literature contains only fragmentary information on this subject. It is known that this disease, which is not found in districts where iodine is plentiful, is widespread in countries which are far from the sea and sea foods, as in high valleys in Europe, India, and South America. Lack of iodine seems to be an essential factor in this disease.

The most widely used prophylactic method consists in adding iodine to table salt. Potassium iodide in amounts varying from 1 part in 10,000 to 1 part in 100,000 according to the country, is added to the crude salt during the refining process which transforms it into table salt; the treatment undergone by the salt makes it possible to fix the iodine in a stable form. The iodization of salt is compulsory in some countries and optional in many others, but numerous countries have taken no steps in this connexion. In many regions and particularly in underdeveloped countries, the people consume salt in its crude form. It is difficult, however, to iodize crude salt in such a way as to produce a stable product. A technical procedure must therefore be found for incorporating iodine into crude salt, before the general application of this prophylactic method is contemplated. Another difficulty arises from the fact that the crude salt used for consumption is produced by small local undertakings. Thus even if an iodization process for salt were perfected it would not be easy to supervise its application.

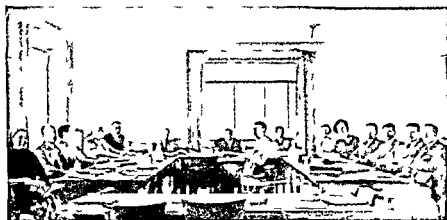
In order to collect information on the extent of the endemic goitre problem throughout the world, WHO sent a circular letter to the governments of Member States, inquiring as to the incidence and distribution of this disease in their countries, the preventive measures in force and

the results obtained by these measures⁴ On the basis of the reports received WHO intends to determine the distribution of goitre throughout the world the part played by iodine in its prevention and the measures applied in the different countries and their efficacy

The goitre problem which is of great importance in South America will be included in the agenda of the coming FAO Regional Conference (Rio de Janeiro 1950) in which WHO will actively participate

Deficiency diseases associated with the vitamin B complex Pellagra the study of which was suggested by the First World Health Assembly has been successfully controlled in many European and American countries by the administration of niacin (nicotinamide) Since the importance

FIG 7 JOINT FAO/WHO EXPERT COMMITTEE ON NUTRITION FIRST SESSION



Round table from left to right: Dr Lu Gwei Djen (UNESCO) Dr W H Sebrell Professor G Beigami a secretary Professeur E F Terroine Dr J M Latsky (FAO) Dr W R Aykroyd (FAO) Lord Horder (Chairman) Dr F W Clements (WHO) a secretary Dr Hazel K Stiebeling Dr J Salcedo Dr V N Patwardhan Professor J F Bock Professor M J L Dolls

and the distribution of this disease in the world are only imperfectly known the committee recommended that WHO should collect all information likely to be of service with a view to possible action at a later stage

One of the members of the committee reported that the addition of synthetic vitamins to rice which was the subject of recent experiments in the Philippines has considerably diminished the incidence of beri beri Similar trials have been made in the Far East

Although the enrichment of rice with synthetic vitamins may be very useful in areas where beri beri is widespread it is merely a palliative The committee stressed the fact that the success of these methods does not dispense with the need for improving diets based on rice

While the origin of certain deficiency diseases is now well known, the cause of various other complaints which also seem due to nutritional deficiencies is still undefined. The committee paid particular attention to one of these diseases, namely kwashiorkor (also known as malignant malnutrition, syndrome depigmentation oedème, etc). This disorder which is encountered in tropical and subtropical areas is, as yet, a poorly defined syndrome and causes very heavy infant mortality in certain countries. In Africa and Central America where this condition is widespread, adults who have suffered from the disease during childhood frequently show cirrhotic changes in the liver. The committee felt that WHO should undertake a study of this disease including the investigation of the diets of the population particularly of pregnant women and young children. Comparison with the diet of peoples free from the disease would perhaps make it possible to discover the causative factor.

The investigation of eye disorders due to faulty nutrition, as well as of certain blood dyscrasias (e.g. anaemia) which also appear to be of nutritional origin should in the view of the committee, also figure in the future programmes of WHO.

Other Matters

Other subjects which will also be studied by FAO are infant nutrition after weaning—in many areas children after weaning are put on a diet consisting of cereal preparations—the improvement of milk supply and the production of foodstuffs capable of replacing milk and compensating for deficiencies in the diet of children.

Close collaboration between FAO and WHO will be maintained not only as regards the surveys and investigations mentioned, but also with respect to general technical and administrative activities such as the allocation of fellowships professional training education of the public, and consultant services to governments.

THIRD SESSION OF THE JOINT OIHP/WHO STUDY-GROUP ON CHOLERA

The guiding principle of the important session of the Joint OIHP/WHO Study Group on Cholera held at New Delhi from 15 to 19 November 1949¹ was a search for the factors responsible for the endemicity of this disease.

Although in the light of present day knowledge and measures the control of cholera epidemics does not present major difficulties the problem

¹ The report on the third session of the Joint OIHP/WHO Study Group on Cholera will be published after approval by the Executive Board in the *World Health Organization Technical Reports Series*.

FIG 8 JOINT OIHP/WHO STUDY GROUP ON CHOLERA THIRD SESSION I



From left to right facing camera Dr C G Pa dit (Chairman) précis w ter Dr R Potlitze (WHO) Professor K Subrahmanyam Sir Aly T Shousha Pasha (WHO Regional Director to the Eastern Mediterranean) Lieutenant Colonel M Jafa From left to right back to camera Dr P M Kaul (WHO) Dr C Mani (WHO Regional Director for South East Asia) M declin Général Inspecteur M A Vaucel Dr M Ga d (OIHP) interpreter

of its endemicity is still full of unknown quantities. Very intensive research has been directed towards this problem so that the study group was able to examine 16 papers which were submitted to it during the session. The prevention of cholera epidemics depends essentially on a thorough knowledge of all the factors in the endemicity of the disease. Specifically if it were possible to eliminate endemic foci as roughly outlined in the light of the data collected the problem of cholera epidemics could also be solved. It is therefore quite evident that this meeting of the study group was of considerable interest.

The bases for these investigations had been laid down during the second session of the Joint OIHP/WHO Study Group on Cholera and certain factors governing endemicity had been suggested as subjects for study*.

Visits to Endemic Areas

The third session of the study group was held at New Delhi to enable the participants to visit several areas of interest from the point of view of the problems which were subsequently to be tackled. In this way the

participants were able to meet the research team of the Indian Research Fund Association in the Tanjore district. They were also able to study on the spot water supply, irrigation systems and the habits of the population, and to visit patients suffering from cholera. The study group was impressed by the spirit of co-operation of the people and by their desire to improve their present state. They also paid a visit to the field laboratory set up at Trichinopoly where bacteriological research and water analyses are carried out under good conditions. It is at this laboratory that the research team of the Indian Research Fund Association has established its headquarters for study and analysis of data.

Cholera Endemicity Problems

Members of the Cholera Advisory Committee of the Indian Research Fund Association and other workers, as well as representatives from the public health administrations of the provinces where cholera is prevalent, were also present at the New Delhi meeting.³

The reports presented dealt with statistical and epidemiological studies and with several important bacteriological investigations. The work of the study group made some new contributions and, if this research continues, the link between epidemic outbreaks may be established. Work is at present being conducted under the auspices of the Indian Research Fund Association, with a grant in aid from the Office International d'Hygiène Publique. Thus with the help of a centrally located field laboratory at Trichinopoly epidemiological investigations are in progress in a selected endemic area of the Cauvery delta which includes 30 villages and 60 000 inhabitants.

Among the papers presented we may mention the viability of the vibrio in foodstuffs, fruit and flies, its persistence in carriers and convalescents, the effect of sulfonamides on vibrio excretion in carriers and convalescents, the Bandi test, etc. Several important conclusions were reached, the results however will have to be confirmed by subsequent work.

The following took part in this meeting:

Members

Lieutenant-Colonel M. J. Far, Director General of Health, Karachi, Pakistan
Dr C. G. Pandit, Secretary, Indian Research Fund Association, New Delhi, India (Chairman)
Médecin Général Inspecteur M. A. Vaucl, Directeur du Service de Santé coloniale, Ministère de la France d'Outre-Mer, Paris, France

Secretariat

OIHP

Dr M. Gaud, Directeur de l'Office International d'Hygiène Publique, Paris, France

WHO

Dr P. M. Kaul, Medical Officer, Epidemiological Studies Section

Also present

Dr C. Mani, Director, WHO Regional Office for South East Asia, New Delhi, India
Dr R. Pollitzer, Epidemiologist, WHO Regional Office for South East Asia, New Delhi, India
Sir Aly T. Shousha, Pasha, Director, WHO Regional Office for Eastern Mediterranean, Alexandria, Egypt (by special invitation)
Professor K. S. Brahmany, Professor of Sanitary Engineering, All India Institute of Hygiene and Public Health, Calcutta, India (special consultant to the study group)

The laboratory diagnosis of the vibrio in acute cholera cases as well as in carriers or convalescents was the subject of an important paper submitted by M L Ahuja K V Krishnan S R Pandit and K V Venkatraman. This work will probably be published shortly in the *Bulletin of the World Health Organization*.

The authors describe the most satisfactory laboratory method for detecting vibrios in stools. In cases of acute cholera it is preferable to seed the nutrient medium directly. On the other hand for the detection

FIG 9 JOINT OIHP/WHO STUDY GROUP ON CHOLERA THIRD SESSION II



Round table from left to right: Dr M Gaud (OIHP), Médecin Général Inspecteur M. A. Vaucel, D. C. Mani (WHO Regional Director for South East Asia), Dr P. M. Kaul (WHO), D. C. G. Pandit (Chairman), précis writer, Dr R. Pollitzer (WHO), Professor K. Subashman, Si. Aly T. Shousha Pasha (WHO Regional Director for the Eastern Mediterranean), Lieutenant Colonel M. Jafar.

of vibrios in the stools of convalescents or carriers enrichment methods must be employed. For this purpose the authors recommend Read's modification of Wilson and Blair's medium. If the number of samples to be examined is too high it is preferable to examine pools of 10 samples at a time and in the event of a positive result to determine the particular sample responsible at a later stage.

Krishnan and Dutta also presented an important paper on the retrospective diagnosis of cholera by means of agglutination tests. This work opens up fresh prospects and will make it possible not only to diagnose cholera retrospectively but also perhaps to investigate the endemicity of an area and to assess the results of inoculation.

A polysaccharide with antigenic properties has been isolated from the vibrio by Ahuja. The potency of the vaccine may possibly be improved by making use of this knowledge.

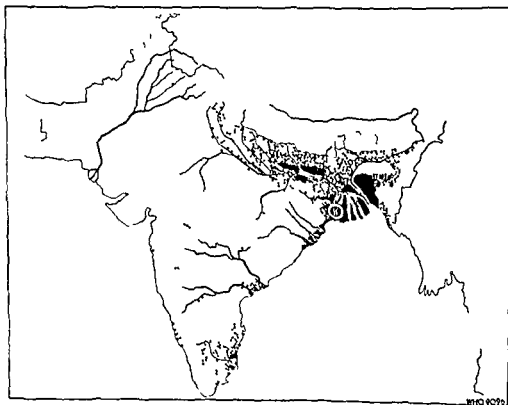
Krishnan also submitted a paper reviewing the present knowledge of the cholera vibrio toxin. Toxicity tests are likely to give us a better understanding of cholera pathogenicity and immunology. A preliminary study by W. Doorenbos and G. N. Cossery Bey, on the reversion of the R type to the S type in the presence of antiphage serum was presented to the study group by Sir Aly Shousha Pasha. This work is still in progress and needs to be definitely established and confirmed.

Endemic Areas in India

Dr S. Swaroop, Professor of Statistics, All India Institute of Hygiene and Public Health, Calcutta, has studied cholera endemic areas in India from three different points of view.

First of all, he took as basis the mortality due to cholera in each cholera infected district and determined the 10 years within the last 45 years in

FIG 10. CHOLERA ENDEMICITY IN INDIA IN RELATION TO THE RIVER SYSTEM



○ — Area of highest endemicity

The degree of endemicity has been based on the average cholera incidence in the 10 years of lowest cholera mortality during the period 1901-1945.

which the average mortality rate was at a minimum. In this way the areas of high moderate low or doubtful endemicity were ascertained as well as the areas free from cholera. The distribution of these areas and the river system are shown in fig. 1. Although it does not give the exact delimitation of the endemic areas, this figure makes it possible to exclude a large number of districts in which endemic cholera is not expected to be found.

Continuity of infection is a more important criterion than the actual number of cholera cases in determining the endemic areas. Basing his work on this principle, the author noted the monthly cholera mortality over a 30-year period for each district as well as the number of times when each district was free from cholera during one, two, three or several months. This procedure gives an approximate idea of the cholera endemicity.

A third method of determining the endemic areas consists in proceeding in the same way but making use of weekly periods. Such statistics are available for the last 10 years. In this way a final grouping of endemic districts was found possible which showed that the endemic areas are located in the alluvial low-lying and most humid areas where the population is most dense.

Factors Governing the Endemicity of Cholera in India

The following factors seem to govern the endemicity of cholera in India: conditions connected with the deltas, high population density, high humidity, abundance of water not subject to any control, and salinity of water with a high organic content. However, in some areas where similar conditions exist, cholera is not endemic. For this reason the study group recommended that data from different areas be compared in order to explain this phenomenon.

No relationship has been found to exist between cholera endemicity and the holding of fairs and festivals, though it is clear that such gatherings and the collective movements of peoples are factors favouring the spread of cholera.

WHO Programme for 1950

The study group noted with satisfaction the decision of the Second World Health Assembly to take the offensive and attempt eradication in well-defined endemic areas rather than to keep a continuous and sterile watch in many provinces and countries against cholera invasion.⁴ The study group therefore recommends the formation of two demonstration teams, one for the deltaic region of Madras, the other for an area in the East Bengal Province of Pakistan. The co-operation of the WHO Environmental Sanitation Section will be indispensable in view of the

intimate relationship between permanent control of cholera and the necessity of providing pure water supplies and of sanitary disposal of excreta

The study group specially recommends

- (1) provision by effective and economical methods, of pure water, in sufficient quantity to obviate the use of uncontrolled water supplies
- (2) provision of adequate toilet facilities for each family,
- (3) assistance of the WHO Health Education of the Public Section in obtaining the co operation of the local population in utilization of these facilities

BILHARZIASIS

At its first meeting held in Cairo between 24 and 29 October 1949,¹ the Joint OIHP/WHO Study Group on African Schistosomiasis (Bilharziasis) stressed that in many countries in which schistosomiasis is endemic, evidence already available indicates that it is a public health problem second only to malaria

The danger resulting from the introduction of irrigation schemes or from the extension of irrigation in certain areas was emphasized by the study group. It is the subject of very important recommendations concerning the safeguards both administrative and technical that are required. No irrigation scheme should be undertaken unless it has first been approved by the public health authorities

In view of the importance of this problem the study group asked WHO to bring the matter to the attention of the United Nations, of the Food and Agriculture Organization and also of those governments that contemplate extending or introducing irrigation systems with a view to increasing food production

The following took part in this session

Members

- Dr M. A. Azim Bey, Director General, Royal Health Department, Ministry of Public Health, Cairo, Egypt (*Chairman*)
Dr D. M. Blair, Director of Preventive Services, Department of Health, Salisbury, Southern Rhodesia
Dr J. Gaud, Directeur de l'Institut d'Hygiène du Maroc, Rabat, Morocco
Dr W. H. Wright, Scientific Director, Chief Division of Tropical Diseases, National Institutes of Health (US Public Health Service), Bethesda, Md., USA

Secretariat

OIHP

- Dr M. Gaud, Directeur de l'Office International d'Hygiène Publique, Paris, France

WHO

- Dr Y. M. Braud, Director, Division of Epidemiology, WHO
Sir Aly T. Shousha, Pasha, Director, WHO Regional Office for the Eastern Mediterranean, Alexandria, Egypt
Dr M. M. Sady, Medical Officer, Epidemiological Studies Section, WHO

The report on the first session of the Joint OIHP/WHO Study-Group on African Schistosomiasis will be published after approval by the Executive Board in the *World Health Organization Technical Reports Series*

Present Extent of the Problem of Bilharziasis

Although the distribution of bilharziasis is not yet known with certainty it is known that endemic and epidemic foci of this disease are wide spread throughout the continents of Africa Asia and America and that about 150 million individuals are affected. The recent meeting in Cairo thus has special importance.

After reviewing the present information regarding the prophylaxis of bilharziasis the study group devoted particular attention to preventing the spread of this disease to new areas. It is a fact that the methods of combating bilharziasis have in practice proved insufficient to check epidemics. In Egypt in spite of great efforts made to control the disease the number of cases is still increasing. The possible spread of bilharziasis in the future must be considered. Indeed bilharziasis may assume catastrophic proportions not only in areas where it is already endemic but also in areas where it does not yet exist or at any rate exists only sporadically. For this to happen it is sufficient that the different factors which cause infection are able to develop and cause an epidemic. Hence the extension or the creation of irrigation systems in areas where bilharziasis is endemic might result in epidemics sufficiently serious to cause losses in capital and human life and to invalidate much effort.

Research Programme

The study group stressed the importance of research on the distribution of bilharziasis according to the species of bilharzia and of snails and has recommended the adoption of uniform methods for this purpose. The knowledge to be obtained by such surveys is necessary to appreciate the social as well as the medical importance of the disease and to enable national and international health authorities to plan and carry out effective control measures. In medical literature information on this subject is in fact incomplete. Other problems which would repay wider research are the importance of bilharziasis as a cause of death of morbidity and of the loss of productive capacity as well as the susceptibility and immunity to infection with bilharzia. On the other hand in order that a comparison of the results of an investigation may be made and also to enable the value of preventive and therapeutic measures to be determined it is essential that uniform methods of diagnosis be adopted both for intestinal and vesical bilharziasis.

Diagnosis Treatment and Prevention

Regarding the methods of diagnosis of intestinal bilharziasis the study group stated that the smear method gives only a low proportion of positive results while rectal swabbing and precipitation in a conical glass of an emulsion of stools in normal or concentrated saline solution give higher

percentages of positive results. Fullborn's method, i.e., hatching the ova in water and then observing the miracidia, also yields a high proportion of positive results. Proctoscopy and rectal biopsy are reserved for doubtful cases. It is, however, necessary to repeat the examinations because the discharge of the eggs is not constant. With regard to the diagnosis of vesical or urinary bilharziasis the specimen of urine should be taken from the last stage of micturition and the sample should be allowed to settle in a conical glass for 30 minutes before examination. The examination may be performed either microscopically or microscopically and, in the latter case will include observing the hatching of the ova. These uniform methods of diagnosis will enable the results of investigations to be compared so that the value of the preventive and therapeutic methods may be determined.

The study group stressed how much it appreciated the work that had been done in Egypt in organizing the campaign against bilharziasis. This work has not only been conceived and carried out according to the most modern scientific methods but it was in Egypt itself that several of the data were required. Even if thanks to these efforts the complications of bilharziasis have decreased in Egypt, it is nevertheless a fact that it has never been as widespread as it is at present. The chief cause of this state of affairs lies in the system of permanent irrigation which favours the propagation of the vectors of the disease. The destruction of snails by chemicals is as yet the best method for controlling bilharziasis since it does not require the active collaboration of the public. Copper sulphate is at present the most widely used molluscicide; it should, however, only be used according to specified methods and techniques. New research on molluscicides and on treatment might bring about an improvement in the present situation. It is known that work is proceeding along these lines and that as a result two new molluscicides, namely pentachlorophenol and pentabromophenol, have been discovered³. Research into the harmlessness of these molluscicides for man, as well as into their activity, should be carried out before they are generally applied. For sterilizing the human reservoir of the disease and for the treatment itself effective easily administered drugs of low toxicity must be made available. The most preferable means of administration would be orally. It is known that the antimonial drugs administered according to the classical method, i.e. by a prolonged series of intravenous injections, cause such inconvenience that many patients abandon the treatment before it is completed.

Recommendations of the Study Group

It stands to reason that without education of the public no measure will be really effective. Educational propaganda should begin at school.

Education must aim at changing the habits and customs which foster infection. It is therefore especially necessary to point out the factors causing pollution of streams.

The need for trained personnel to carry out bilharziasis surveys and to conduct the campaign against this disease will become increasingly urgent. It is therefore recommended that WHO should grant fellowships for the training of specialists and if necessary should organize courses on bilharziasis in specialized centres.

As regards the extension or creation of irrigation systems the study group formulated clear recommendations of an administrative and technical nature.

Approval of the plans by the public health authorities should be a prerequisite for any kind of new irrigation system and for the financing of such work out of public funds.

Every irrigation area should be provided with a medical and sanitary organization capable of examining and treating if need be the population of such an area. Villages should be set up as far as possible from streams and canals and should be provided with drinking water and privies in accordance with hygienic requirements. It is known that it is possible to remove cercariae from water either by storage in reservoirs protected from snails or by disinfection with chlorine in a concentration of 1 part per million. This latter method enables the cercariae to be destroyed within 30 minutes.

The study group urged that the priority of Bilharz as describer of the causative parasite of schistosomiasis should be recognized and that accordingly the name of *Bilharzia* be retained for its genus and the name bilharziasis for the disease. WHO will have to take the appropriate steps with the Nomenclature Committee of the International Zoological Congress and with the WHO Expert Committee on Health Statistics as regards respectively the names of the parasite and of the disease.

PUBLIC HEALTH IN THE TRUST AND NON-SELF-GOVERNING TERRITORIES

In accepting as a sacred trust¹ the responsibility of ensuring the political economic social and educational advancement of the 200 000 000 inhabitants of the non self governing territories the governments administering these territories recognize the necessity of concerning themselves with health matters a prime factor in social progress. These

percentages of positive results. Fulleborn's method i.e. hatching the ova in water and then observing the miracidia also yields a high proportion of positive results. Proctoscopy and rectal biopsy are reserved for doubtful cases. It is however necessary to repeat the examinations because the discharge of the eggs is not constant. With regard to the diagnosis of vesical or urinary bilharziasis the specimen of urine should be taken from the last stage of micturition and the sample should be allowed to settle in a conical glass for 30 minutes before examination. The examination may be performed either microscopically or macroscopically and in the latter case will include observing the hatching of the ova. These uniform methods of diagnosis will enable the results of investigations to be compared so that the value of the preventive and therapeutic methods may be determined.

The study group stressed how much it appreciated the work that had been done in Egypt in organizing the campaign against bilharziasis. This work has not only been conceived and carried out according to the most modern scientific methods but it was in Egypt itself that several of the data were acquired. Even if thanks to these efforts the complications of bilharziasis have decreased in Egypt it is nevertheless a fact that it has never been as widespread as it is at present. The chief cause of this state of affairs lies in the system of permanent irrigation which favours the propagation of the vectors of the disease. The destruction of snails by chemicals is as yet the best method for controlling bilharziasis since it does not require the active collaboration of the public. Copper sulphate is at present the most widely used molluscicide it should however only be used according to specified methods and techniques. New research on molluscicides and on treatment might bring about an improvement in the present situation. It is known that work is proceeding along these lines and that as a result two new molluscicides namely pentachlorophenol and pentabromophenol have been discovered³. Research into the harmlessness of these molluscicides for man as well as into their activity should be carried out before they are generally applied. For sterilizing the human reservoir of the disease and for the treatment itself effective easily administered drugs of low toxicity must be made available. The most preferable means of administration would be orally. It is known that the antimonial drugs administered according to the classical method, i.e. by a prolonged series of intravenous injections cause such inconvenience that many patients abandon the treatment before it is completed.

Recommendations of the Study-Group

It stands to reason that without education of the public no measure will be really effective. Educational propaganda should begin at school

³ Nolan M. O. & Berry E. G. (1949) *Publ. Hlth. Rep. Wash.* 64: 94

state as determined from epidemic or endemic diseases and from nutritional deficiency diseases and finally the causes of death. The *Questionnaire* also contains requests for information on the activity of the health services, the protection of the health of workmen and the measures taken to control malaria and other endemic diseases, tuberculosis, leprosy, venereal diseases, etc. Questions regarding sanitation treat particularly with the disposal of waste matters, the supply of drinking water and the inspection of foodstuffs. A final group of questions concerns the academic qualifications necessary for the practice of medicine and the institutes of higher education where the inhabitants of the country may acquire a diploma in medicine, dentistry, pharmacy or sanitation.

Items of a similar nature are also found in the *Standard Form* for which the panel of experts proposed revisions analogous to those suggested for the *Questionnaire*.

WHO Publications

World Health Organization Technical Report Series

Beginning in 1950 reports of meetings of the expert committees and other technical advisory bodies convened by or held under the auspices of the World Health Organization will be published as a new series and not as heretofore in the *Official Records of the World Health Organization*.¹

Now available in this series are

- 1 Expert Committee on the Unification of Pharmacopoeias report on the fourth session
- 2 Expert Committee on Biological Standardization report on the third session
- 3 Expert Committee on Biological Standardization report of the Subcommittee on Fat Soluble Vitamins

In press are the following

- 4 Expert Committee on Insecticides report on the first session
- 5 Expert Committee on Health Statistics report on the first session
- 6 Active immunization against common communicable diseases of childhood

International Digest of Health Legislation

Vol 1 No 2 of the *International Digest of Health Legislation* has now been published in English and in French. The *Digest* contains reprints and translations of or extracts from the texts of the most important laws and regulations dealing with public health and related subjects sent by governments in fulfilment of their obligations under Article 63 of the Constitution of the World Health Organization.

This number of the *Digest* contains 33 laws from 13 different countries—on subjects as diversified as Deratization of Ships and Control of Antibiotics. Also included is a list of titles of laws published in official gazettes or promulgated by governments during 1947.

governments send regularly to the Secretary General of the United Nations information on the economic and social conditions including public health, in the territories under their management

These reports on the welfare and progress of the non self governing peoples are of two types Those dealing with trust territories (British Cameroons British Togoland French Cameroons, French Togoland Nauru, New Guinea Pacific Islands Ruanda Urundi, Tanganyika, Western Samoa) must be submitted annually to the Trusteeship Council of the United Nations Reports on the 68 non self governing territories are optional and are examined by a special commission set up by the General Assembly of the United Nations

To ease the task of the authorities responsible for preparing these reports and to facilitate their analysis and integration by the Secretary General of the United Nations a *Questionnaire* was drawn up in 1947 for the use of governments administering the trust territories, a *Standard Form* was devised to serve the same purpose for those concerned with the interests of the non self governing territories These two documents contain a list of headings and indicate the points on which information is required Questions on public health and sanitation are included under the heading Social Conditions It was considered advisable to revise this section in both the *Questionnaire* and the *Standard Form* A panel of experts² assembled by WHO met in Geneva from 19 to 21 September 1949 for this purpose and proposed various modifications of these two documents which in their new form will not only be more precise and detailed but will also make comparisons of information contained therein easier

In the *Questionnaire* are headings such as population figures classified by age sex and race and statistics on birth rates, mortality rates, infant mortality and maternal mortality (The maternal mortality rate will be calculated on the basis of the number of deaths per thousand live births due to the causes enumerated under headings 640-689 in the *International Statistical Classification of Diseases Injuries and Causes of Death*) Other questions concern the organization of the health services and the budget allocated for these services (including the proportion of the total revenue of the territory which it represents) the various hospital facilities (maternity homes treatment centres for treponematoses leper hospitals etc) the health and nutritional state of the population the morbidity

The following were present at this meeting

Members

Professor G Macdonald Director Ross Institute of Tropical Hygiene London School of Hygiene and Tropical Medicine London United Kingdom
Professeur J Rodhain Directeur honoraire de l'Institut de Médecine tropicale Prince Léopold Antwerp Belgium
Médecin-Colonel G Saleun Adjoint technique du Directeur du Service de Santé colonial Ministère de la France d'Outre Mer Paris France

Secretary

Dr G W Miller Assistant to Director Division of Planning WHO



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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Notes and News

WHO Antimalarial Team Fights Plague Epidemic in India

A WHO antimalarial demonstration team¹ headed by Mr P. Bierstein, a sanitary engineer, has assisted in fighting an outbreak of plague that occurred at Shimoga in the State of Mysore (India). Plague, which is endemic in this town of 60 000 inhabitants, assumed violent epidemic proportions at the end of October 1949. The method of control adopted consisted in spraying DDT in suspension; this technique was specially adapted so that it would be effective against fleas, the vectors of the disease. Mr Bierstein and seven of his staff, assisted by locally recruited personnel, were able to start work by 4 November.

WHO Mental Health Consultant in the Philippines

The Philippine Republic has been the first country to request the aid of WHO for assistance in establishing a modern organization to deal with the mental health problems throughout its territory.

Dr E. E. Krapf of Buenos Aires, WHO expert consultant, left Geneva on 12 November 1949 for a two to three months' mission in the Philippines. He is to meet local psychiatrists who will assist him in surveying the country's resources and needs, and will stay first of all in Manila. Dr Krapf will later submit a mental health programme to the Philippine Government covering both the preventive and therapeutic aspects of the problem.

Dr Krapf is Associate Professor of Psychiatry at the University of Buenos Aires, a member of the Executive Board of the World Federation for Mental Health, and is the author of more than 60 publications.

Bulgaria Decides to Withdraw from WHO

In a letter dated 29 November 1949, addressed to Dr Brock Chisholm, Director General of WHO, and received in Geneva on 6 December, the Bulgarian Minister for Foreign Affairs communicated his Government's decision to withdraw from the World Health Organization.

In his letter, the Bulgarian Minister for Foreign Affairs recalled that during the Second World Health Assembly, held in Rome in June 1949, Bulgaria was among those countries which had criticized the methods adopted and the results obtained by WHO. He added that the activities of the Organization and the practical results obtained are completely insufficient, above all in the domain of mutual assistance in the international health field, whilst the methods and policies adopted are adjudged inadequate in relation to the tasks entrusted to the Organization at its inception. The Member States of WHO were informed at once of this decision by a circular letter.

Bulgaria is the fourth country that has declared its intention of withdrawing from the Organization: for in February 1949, the USSR, Byelorussia and the Ukraine let it be known that they no longer considered themselves Members of WHO.²

Sixty-eight States Members of WHO

Bolivia has recently ratified the Constitution of WHO, thus bringing the total number of Member States of the Organization to 68. A list of countries which are now members of WHO (listed according to the dates of ratification) may be found in *Chron. World Hlth Org.* 1949, 3: 298.

¹ See *Chron. W. Hlth Org.* 1949, 3: 135.
² *Chron. W. Hlth Org.* 1949, 3: 56.

NEW DEVELOPMENTS IN VENEREAL-DISEASE CONTROL

Third Session of the Expert Committee on Venereal Infections

Technical considerations were the principal concern of the WHO Expert Committee on Venereal Infections when it met for its third session¹ held in Washington from 10 to 20 October 1949. The committee discussed control techniques, antibiotic therapy in syphilis and other treponematoses, serological and laboratory aspects of venereal infections, and the report of the WHO Syphilis Study Commission to the USA.

Treponematoses

Although major effort in WHO's venereal disease programme is to be concentrated on early infectious syphilis and prenatal and infantile syphilis, several developments have made imperative a broader consideration of the entire group of treponematoses. Of these developments, most important is the evidence that the various treponematoses—syphilis, yaws, pinta, and bejel—respond to penicillin treatment. This seems to substantiate the hypothesis of Hudson² that the treponemal diseases

The following table reports the session.

Members

- Dr W. E. Coutts, Professor of Venereology, Chief Department of Social Hygiene, Public Health Administration, St. Louis, Chicago, U.S.A.
 Dr R. D. Goss, Professor agrégé à la Faculté de Médecine de Paris, France.
 Dr S. H. Hirschman, Professor of Dermato-syphilology, University of Stockholm, Sweden.
 Dr E. H. Hirschman, Medical Director, Association for the Combating of Venereal Diseases, Rotterdam, Netherlands.
 Dr J. P. Mahoney, Chief Laboratory of Antibiotic Research and Development, Section of Laboratory of Infectious Disease Microbiology, Institute of National Institutes of Health (U.S. Public Health Service), State Island, New York, U.S.A. (Chairman).
 Dr G. L. M. Elliot, Director, Venereal Disease Department, St. Mary's Hospital, Addis Ababa, Venereal Disease Ministry of Health, London, United Kingdom (Rapporteur).
 Dr I. H. Nigam, Director, Venereal Disease Section, Ministry of Public Health, Cairo, Egypt.
 Dr R. V. Raj, Professor of Venereology, Government General Hospital, Madras, India (Vice-Chairman).

Co-opted Consultants

- Dr N. R. L. G. H. M. Chief Division of Venereal Disease Control, Department of Public Health, Philadelphia, U.S.A.
 Dr P. V. Marcussen, Physician in charge, Venereal Disease Clinic, Kommunehospitalet, Copenhagen, Denmark, Chairman, WHO Syphilis Study Commission, United States.
 Dr E. W. Thomas, Professor of Clinical Medicine, New York University College of Medicine, Director, Robert T. La Follette Center for Biologic Hospital, New York City, New York, U.S.A.

Observers

- Dr G. E. Smith, Venereal Disease Consultant, American Society for the Study of Venereal Diseases, Washington, D.C., U.S.A.
 Dr P. S. N. Ch. Venereal Disease Division, Department of Health, Caracas, Venezuela.
 Dr W. P. Snow, President, International Union against Venereal Diseases, New York City, New York, U.S.A.
 A. Woodhock, Laboratory Office, Washington, D.C., U.S.A.

Secretariat

- Dr T. G. Ch. Venereal Disease Section, WHO (Secretary).
 Dr A. Spillmann, Regional Administrator, Venereal Diseases for Europe, WHO.
 Dr M. Gryzbowski, Professor of Dermatology, Director, Clinic of Dermatology and Syphilology, University of Warsaw, Poland was nominated.

Held at E. H. (1946) Treponematoses, New York.

RECENT AND FORTHCOMING MEETINGS

1949

26-28 September	WHO Regional Committee for South East Asia second session New Delhi
26-28 September	Joint OIHP/WHO Study Group on African Rickettsioses first session Paris
26 September 5 October	WHO Expert Committee on the Unification of Pharmacopoeias fifth session Geneva
10-20 October	WHO Expert Committee on Venereal Infections third session Washington D C
12-15 October	WHO Regional Committee for the Eastern Mediterranean second session Geneva
12-20 October	WHO Expert Committee on Venereal Infections Subcommittee on Serology and Laboratory Aspects Washington D C
24-28 October	Joint FAO/WHO Expert Committee on Nutrition Geneva
24-29 October	Joint OIHP/WHO Study Group on African Schistosomiasis first session Cairo
18-19 November	Joint OIHP/WHO Study Group on Cholera third session New Delhi
1-6 December	WHO Yellow Fever Panel first session Geneva
5-14 December	WHO Expert Committee on International Epidemiology and Quarantine second session Geneva
12-14 December	Joint ILO/WHO Committee on the Hygiene of Seafarers first session Geneva

1950

6-30 January	WHO Executive Board Standing Committee on Administration and Finance Geneva
9-14 January	WHO Expert Committee on Drugs Liable to Produce Addiction second session Geneva
16 January 2 February	WHO Executive Board fifth session Geneva
6-11 February	WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel first session Geneva
20-26 February	WHO Expert Committee on Nursing first session Geneva
February tentatively	Joint ILO/WHO Committee on Industrial Hygiene first session Geneva
February tentatively	WHO Expert Committee on Health Statistics Subcommittee on Cancer Registration
February tentatively	WHO Expert Committee on Health Statistics Subcommittee on the Definition of Stillbirth and Abortion
6 March	WHO Regional Committee for Europe first session Geneva
20 March tentatively	WHO Expert Committee on Health Statistics Subcommittee on Hospital Statistics
11-15 April	Expert Committee on Antibiotics first session Geneva
17 April tentatively	WHO Expert Group Meeting on Prematurity Geneva
20 April tentatively	WHO Expert Committee on Health Statistics second session
20-29 April	WHO Expert Committee on the Unification of Pharmacopoeias sixth session New York
8 May	Third World Health Assembly Geneva

nological relationship between the causative agent of the various treponematoses in man and animals a distinction which cannot be made with classical serological methods

A third important technical consideration is the recent support given to the identification of bejel as an endemic syphilitic disease. The committee recommended that the bejel project in the Eastern Mediterranean area should get under way early in 1950⁵. This project proposed by the Director General of WHO and adopted by the Regional Committee for the Eastern Mediterranean, calls in the first place for a survey to be carried out by a special team of 3 or 4 experts who would explore the epidemiological, clinical and laboratory aspects of bejel. Next would be the selection by this team of a special demonstration area where a disease eradication campaign based on penicillin and modern case finding techniques could be carried out. On the basis of experience gained in the demonstration area it would be possible to proceed with a broad campaign against bejel over a wide area. Concomitant with the control programme would be comparative laboratory studies particularly on the treponemes of syphilis and bejel. It was the opinion of the Expert Committee on Venereal Infections that the pilot area for field and laboratory investigations should be established in Iraq as soon as the hot season is over.

It is felt that WHO can make a significant contribution to the ultimate definition of the nature of treponemal diseases in man and of their biological and immunological relationships by utilizing the clinical and laboratory material available in field units and national laboratories in areas where treponematoses are prevalent. The disease eradication campaigns against yaws and syphilis in Haiti and against bejel in the Eastern Mediterranean area will be a step in this direction.

Two considerations of an administrative nature were brought to the attention of the Expert Committee on Venereal Infections.

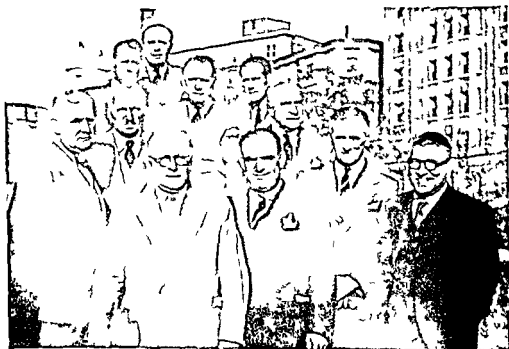
1 The referring of treponematoses other than syphilis to the Expert Committee on Venereal Infections by the Executive Board and the World Health Assembly

2 The decision of the Second World Health Assembly to establish in 1950 an Expert Committee on Treponematoses to be composed of 9 members including 3 syphilis experts of the present Expert Committee on Venereal Infections⁶. The latter recommended that the terms of reference of the new committee be clarified so as to avoid duplication of effort or that WHO consider merging the two committees in 1951. Also recommended was the establishment of appropriate study groups or subcommittees as required.

including syphilis are caused by closely related organisms but exhibit varying clinical and epidemiological patterns in different parts of the world, possibly because of environmental factors

The success of mass application of penicillin in eradication projects against yaws and syphilis in parts of Africa certain Pacific islands and the USA has encouraged WHO support of the campaign against yaws which is part of the United Nations technical assistance to Haiti³ The Expert Committee on Venereal Infections welcomed this project as an

FIG 1 EXPERT COMMITTEE ON VENEREAL INFECTIONS THIRD SESSION



Front row left to right Dr E H Hermans Dr R Degos Dr G L M McElligott (Rapporteur) Dr R V Rajam (Vice Chairman) Middle row left to right Dr J F Mahoney (Chairman) Dr I H Nagi Dr S Hellerstrom Dr T Guthe (WHO) Dr W E Coutts Back row left to right Dr P V Marcussen Dr A Spillmann (WHO)

opportunity to demonstrate the effectiveness of control programmes based on penicillin in a large scale campaign in a geographically delimited area with a high prevalence of disease It recommended that procaine penicillin G in oil with 2% aluminium monostearate be the form of penicillin employed

A second significant development is the treponemal antibody technique introduced by Nelson⁴ which permits study of the biological and immu

survey incomplete however and recommended that the study be continued

The committee discussed the use of repository penicillin preparations which have greatly simplified penicillin therapy¹⁰ A single injection of 300 000 Oxford units of procaine penicillin with 2% aluminium mono stearate can maintain an effective blood level for about 96 hours Penicillin treatment in dosages of 600 000 to 2 400 000 units has special significance in cases of early infectious syphilis The committee recommended that sufficient time has not yet passed to evaluate with certitude the ultimate results of this penicillin treatment However it is remarkable that in observations made during the last two years there do not appear to have occurred any completely acceptable instances of central nervous system relapse in patients who received adequate penicillin therapy in the early stages of infection This gives hope that the danger of development of syphilis of the central nervous system may pass and that the prolonged post treatment follow up which is presently necessary may be curtailed and a shorter routine adopted

Recognizing the epidemiological value of penicillin the committee considered that its use on a large scale should be organized as part of public health activities in areas with a high prevalence of treponemal disease To compare its efficacy with older methods of treatment a group of three members of the committee will report at a subsequent meeting on suitable case material treated with (a) arsenicals and/or bismuth and (b) penicillin preparations

With regard to the *Pharmacopoea Internationalis* now being prepared by an expert committee of WHO¹¹ it was suggested that the characteristics of vehicles and water repellent substances used in penicillin preparations be included in the *Pharmacopoea* Standardization of repository preparations is essential if comparative investigations are to be valid The committee also considered that the following drugs should be included in the *Pharmacopoea Internationalis*

Arsenoxides	Streptomycin
Aureomycin	Sulfadiazinum
Neoarsphenamine	Sulfaguanidinum
Procaine penicillin G	Sulfathiazolum
Sodium penicillin G	

Maritime Aspects

The committee made specific recommendations regarding these questions calling attention to the desirability of more countries adhering to the Brussels Agreement pending the establishment of wider interna

Serodiagnosis

Of major importance in any venereal disease activity is to have uniform, effective and practical means of serodiagnosis. At the present time there is little uniformity in the methods used and comparisons of reactions are not always valid. The same method may give different reactions in the same patient because of differences in the material or in the technique employed. There are numerous other complicating factors chief among which are

1 Unreliability of test methods under different climatic conditions. Test methods which are reliable in temperate climates often fail under tropical conditions.

2 Impracticability of some of the most reliable techniques. Procedures which are very elaborate and expensive have limited use, particularly in mass screening activities under field conditions.

3 Limited manufacture of cardiolipin antigens. Technical difficulties and the patent protection for the production of cardiolipin lecithin make the wide use of this means of serodiagnosis very difficult at present.⁷

Although the situation with regard to serodiagnosis is unsatisfactory the committee did not want their observations to be taken as a complete invalidation of present methods. The problem becomes one of trying to improve serodiagnostic methods. According to the committee, "the most promising development in this regard is the introduction of the immobilizing antibody technique (Nelson and Turner). The differentiation between what appear to be true and non specific reagins employing this technique may in future prove of fundamental importance in the serodiagnosis of syphilis."

The committee recommended that the Subcommittee on Serology and Laboratory Aspects, the report of which is discussed elsewhere in this issue⁸ proceed with its programme for the establishment of an international antigen reference standard study the possibility of recommending a uniform test procedure to all countries and consider setting up international reference centres for making control sera and antigens available to national laboratories.

Antivenereal Drugs and Therapy

A survey recently made by WHO shows that penicillin consumption is likely to increase progressively in all parts of the world whereas production will probably remain limited for some time to Europe and America.⁹ The Expert Committee on Venereal Infections considered this

⁷ See page 44

See page 41

Ch on World Health Org 1949 3 9

SEROLOGY OF SYPHILIS

The Subcommittee on Serology and Laboratory Aspects (of the Expert Committee on Venereal Diseases) devoted the major part of the discussions at its first session¹ held in Washington from 12 to 20 October 1949 to the question of the International Serological Laboratory Conference which the World Health Organization proposes to convene in 1951 or 1952. Similar conferences took place in 1923 and 1928 at Copenhagen and in 1930 at Montevideo. The war prevented the holding of one in Copenhagen in 1939 as had been planned. In 1941 a conference for the Western hemisphere met in Washington. It was of great benefit to the subsequent development of research in the USA and laid the foundation for further standardization work in the serology of syphilis.

Need for an International Conference

The need to hold a new laboratory conference is making itself urgently felt. The fact is as was stressed by the subcommittee that present techniques for the serodiagnosis of syphilis lack uniformity: different methods of reporting the results of serological tests lead to confusion and render valueless many of the studies published in the past on the serology of syphilis. The present position is such that an individual may be declared syphilitic in one country and free from the disease in another.

There are in addition other factors emphasizing the need for an international serodiagnostic laboratory conference. New serological tests have been introduced into practice in the USA and elsewhere during recent years but many countries have not yet tried them out. Some of these tests employ antigen components of a much higher degree of chemical purity than the ones previously used. This is particularly true in the case of antigens containing cardiolipin and purified lecithin which have been found more sensitive and more specific than antigens prepared with less

The following took part in this session:

- Members*
 A. H. R. S. (Serology & Venereal Disease Research Laboratory (US Public Health Service) Station Isl. d. N.Y. USA)
 Dr P. Kr. A. (State Director, Serodiagnostic Department, Stat. Serum Institut, Copenhagen, Denmark) (Chairman)
 Dr R. Laport (Chef de Service de Sérologie, Institut Pasteur, Paris, France)
 Dr L. N. Orpwood (Associate Director, Venereal Diseases Research Laboratory (Public Health Laboratory Service), St. Peter's Hospital, London, U.K.) (Secretary) (Chairman)
Consultants and Advisors
 Dr P. V. Marc (Associate Physician, Venereal Disease Clinic, Kommunehospitalet, Copenhagen, Denmark)
 Dr T. B. T. (Professor of Bacteriology, School of Hygiene & Public Health, Johns Hopkins University, Baltimore, Md., USA)
 Dr M. V. (Associate Medical Director, Hygienic Laboratories, Los Angeles, Cal., USA) (Member of WHO Expert Committee on Biological Standardization)
Secretaries
 Dr T. G. (Chief Venereal Diseases Section, WHO (Secretaries))
 Dr A. Spilim (Registrar, Venereal Diseases, European WHO)
 The report on this session will be published shortly in *World Health Organization Technical Reports Series* No. 14.

tional regulations for venereal disease control and to the need for liaison with the Joint ILO/WHO Committee on the Hygiene of Seafarers

Study Commission to USA

The committee expressed the opinion that the interim report of the WHO Syphilis Study Commission to the United States represents a significant contribution which many health administrations, institutions and workers in the venereal disease field will wish to have as a reference document. The results obtained by the Commission will be summarized in a forthcoming issue of the *Chronicle*. The report itself will be published shortly as *World Health Organization Technical Report Series* no 15

Developments and Perspectives

In setting forth long and short term objectives for WHO's venereal disease activities the committee emphasized the following points

- 1 Priority should be given to economically underdeveloped areas with a high prevalence of syphilis and/or other treponematoses
- 2 WHO should continue its advisory and demonstration services and should stimulate training of personnel in the field. The facilities in demonstration areas can be used effectively in training programmes
- 3 Venereal disease control activities should be integrated with other public health programmes particularly those relating to general disease prevention and to maternal and child health. Pregnancy care provides an opportunity for case finding not only among mothers but also among other members of families. Mass examinations for malaria and tuberculosis also aid in finding cases. Antisyphilitic programmes should be combined with measures against other treponematoses where these are prevalent. An effort should be made to initiate activities which can continue to operate after outside assistance is withdrawn
- 4 WHO should continue to assemble and distribute venereal disease literature to health administrations and other institutions concerned. The rapidity of technical developments in the therapeutic and laboratory aspects of venereal disease control make it difficult for research and field workers in all countries to be adequately informed. WHO's services as a clearing house and distribution centre for venereal disease literature have significant value

The report on this session of the Expert Committee on Venereal Infections will be published as *World Health Organization Technical Report Series* no 13

SEROLOGY OF SYPHILIS

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The following took part in this session:

Members

- A. HERRA S. N. O. Serology & Venereal Diseases Research Laboratory (US Public Health Service) Staten Island, N.Y., USA.
 D. P. KRUG, Assistant Director, Serodiagnostics Department, State Serum Institute, Copenhagen, Denmark (Chairman).
 D. R. I. PORTER, Chief, Division of Serology, Institut Pasteur, Paris, France.
 D. I. N. OGPWOD, Principal Director, Venereal Diseases Research Laboratory (Public Health Laboratory Service), St. Paul's Hospital, London, United Kingdom (Secretary).

Consultants and Advisors

- D. P. V. M. RICH, Physician in Charge, Venereal Disease Clinic, Kommunehospitalet, Copenhagen, Denmark.
 Dr. T. B. TAYLOR, Professor of Bacteriology, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md., USA.
 Dr. M. V. LID, Medical Director, Hygienic Laboratories, Los Angeles, Cal., USA (Member of WHO Expert Committee on Biological Standardization).

Secretariat

- Dr. F. G. THORNTON, Chief, Venereal Diseases Section, WHO (Secretary).
 Dr. A. SPILLIMAN, Regional Administrator, Venereal Diseases Section, WHO.

The report on this session will be published shortly as *World Health Organization Technical Report Series*, No. 14.

pure extracts. The advances made in this field open up the possibility of establishing a durable reference antigen standard. It is clear that developments of the greatest interest are possible in this direction.

Furthermore, a new method has been evolved which arouses great hopes among serologists, namely Nelson's treponemal antibody technique.² According to this technique, the serum of syphilitic rabbits and of persons in whom the disease has proceeded beyond the primary stage immobilizes virulent *Treponema pallidum* and causes it to lose its power of infecting the rabbit. This immobilization, which develops only in the presence of complement, appears to be due to a specific antibody which is different from and independent of the reagin detected in ordinary serological tests. As may be imagined, Nelson's technique opens up great possibilities in the immunology of syphilis. Moreover, as pointed out by the subcommittee, it could play an important part in the interpretation of false positive reactions.

Finally, there is an important reason, in addition to the above technical grounds, for organizing this conference on a world scale. Investigations so far made show that in certain areas, particularly in the tropics, sero-positive reactions are extremely frequent; furthermore, the frequency varies according to the type of test used in serodiagnosis. It follows that the evaluation of the tests and choice of reactions adapted to the various areas represent a problem which should be tackled on a world scale. Consequently, it will be necessary to obtain for the conference sera originating in different parts of the world. The subcommittee therefore appealed to all important laboratories to collaborate.

General Plans for the Conference

After unanimously recognizing the need for an international conference on serological techniques, the subcommittee took up the practical side of its organization, which it discussed in its broad outlines. Various suggestions were examined concerning the date, place, number of participants, general programme of work, etc. In the view of the subcommittee, the conference should be convened in a city which is an important medical centre and which has an airport served by one or more world airlines, so as to ensure the transport of samples of sera coming from different parts of the world in the minimum time. Laboratories should be chosen so as to offer the best working conditions to the greatest possible number of authors of tests. London, Paris, or Copenhagen would fulfil these various conditions. The number of methods which would be demonstrated at the conference is estimated to be about 40. They should be selected on a purely technical basis, the demonstrations being given by the author of the method or by workers designated by him.

The subcommittee was of the opinion that tests should be run on at least 3 000 sera at the rate of 200 a day and on 250 samples of spinal fluid at the rate of 16 per day

The categories of sera with which the tests would deal would be the following

Normal sera About 1 500 samples taken from individuals not showing any morbid symptoms—but not a serologically pre selected group—coming from at least three geographical areas

Abnormal non syphilitic sera About 500 samples taken from individuals suffering from malaria leprosy herpes genitalis from patients who are febrile owing to disease from pregnant women etc about 300 samples of sera giving false positive reactions and also complying with various definite conditions

Syphilitic sera About 1 000 samples taken from individuals suffering from primary secondary or tertiary syphilis of whom only a part have received appropriate treatment The number of recent untreated cases should not be below 100

Spinal fluid Samples from subjects without syphilitic symptoms and from syphilitics in whom the central nervous system has not been affected

National Centres for Serodiagnosis

Other problems dealt with during the session are also indirectly connected with the projected conference particularly co operation between laboratories or national centres in the reciprocal evaluation of performance of tests and the exchange of information

Samples of sera and antigens intended for serodiagnosis have already been exchanged between laboratories in Bulgaria Denmark Ethiopia Finland France Italy and the United Kingdom and the Venereal Disease Research Laboratory of the US Public Health Service which acted as reference centre These exchanges were found to be so fruitful that they might well be established on a more systematic basis This system should be extended to national laboratories in all WHO regions Such exchanges of information between laboratories might also make useful contributions to the methods of conserving sera particularly those which give false positive reactions present knowledge on this subject is very limited

The subcommittee suggested that WHO draw the attention of national health administrations to the necessity of establishing in each country a laboratory or national centre for the serodiagnosis of syphilis to participate in action taken in this field on an international scale

Other Questions

After having examined various questions relating to the projected conference the subcommittee proceeded to deal with several other subjects

In particular it studied the problem of cardiolipin, that of bejel and the other treponematoses, considered from the serological viewpoint and the various problems raised by the technique of mass serological examinations

Cardiolipin

The use of antigens based on cardiolipin lecithin had been advocated by the Expert Committee on Venereal Diseases during its second session³ in an effort to encourage the standardization of serological tests for the diagnosis of syphilis

There are two important obstacles to the general use of cardiolipin the technical difficulties encountered in large scale production of this substance and the fact that its manufacture is protected by a patent The latter which is held by the New York State Department of Health, was established not for commercial purposes but to ensure the purity of the cardiolipin products It has been suggested that WHO administer this patent internationally The subcommittee considered that if the administration of international patents were not within the province of WHO the problem could be approached in another way the possibility of establishing an international cardiolipin reference standard might be considered in conjunction with the Expert Committee on Biological Standardization should developments in this field indicate this to be advisable A high degree of purity of cardiolipin is essential to ensure the accuracy of serological tests employing antigens containing cardiolipin and purified lecithin Consequently the current purity control tests for this substance should be studied by the subcommittee

Bejel syphilis and other treponematoses

Thanks to technical improvements made during the last two years, it is now possible to obtain sufficiently concentrated and pure suspensions of treponemata i.e. without tissular impurities for the study of various serological problems connected with the immunology of syphilis, false positive reactions and the relationships both biological and immunological between the various strains of treponemata The members of the subcommittee had an opportunity, thanks to the courtesy of the Department of Bacteriology Johns Hopkins School of Hygiene and Public Health Baltimore to become acquainted with research on treponemal antibodies and particularly with the new treponemal antibody technique

Several interesting points were brought to light by the comparative study of the different techniques

The titre of the immobilizing antibody (Nelson's antibody) is generally high in syphilis at times it is distinctly at variance with the reagin titres obtained by the lipid antigen method After specific treatment the Nelson

antibody persists longer than the reagin. Finally there is the particularly striking fact that the Nelson test has been consistently negative in all cases of undeniably false positive reactions. Furthermore the Nelson technique has made it possible to differentiate strains of *T pallidum* and *T pertenue*.

These results promise developments of the greatest interest. On the one hand, as pointed out by the subcommittee, the treponemal antibody technique enables a different approach to be made to the study of false positive reactions and perhaps to elucidate their nature. On the other hand, it may make it possible to study the various strains of treponemata with reference to their biological and immunological inter relationships.

The programme for the control of bejel will enable interesting experiments in this field to be made in the near future. This WHO project for a campaign against bejel in the Eastern Mediterranean region, where this disease represents an important public health problem, met with the approval of the subcommittee. From the serological viewpoint various investigations could be undertaken in which the new techniques would play a part. The results obtained would increase present knowledge of bejel and throw light on the problem of the other treponematoses. These studies would be concerned with the following points:

- (a) serological relationship between bejel and syphilis
- (b) nature and extent of bejel
- (c) experimental infection of the rabbit with the bejel treponema
- (d) immunity and cross immunity in experimental treponematoses (syphilis, pinta, yaws, bejel)

Mass serological examinations

The general application of mass serological examinations has shown the acute nature of certain serological problems, such as false reactions—both positive and negative—the drawbacks attached to the use of a single test for diagnosis, etc. To these technical questions are added problems of a practical nature, e.g. pressure of work in laboratories which have to carry out thousands of flocculation or complement fixation tests daily, the inadequate equipment of laboratories in underdeveloped areas, etc.

The subcommittee noted various practical experiences, particularly the satisfactory results obtained by the WHO venereal disease demonstration team at Simla in Northern India⁴ with a modified Meinicke test used in conjunction with a cardiolipin test.

On the basis of this preliminary information, the subcommittee recommended that techniques suitable for mass examinations be studied and that the results and the statistical data collected by the demonstration teams be assembled and submitted to the subcommittee at its next session.

ANOTHER STAGE IN PREPARATION OF INTERNATIONAL SANITARY REGULATIONS

Second Session of the Expert Committee on International Epidemiology and Quarantine

The new international sanitary regulations are intended to standardize and replace the existing international conventions particularly those of 1926, 1933 and 1938 which were drawn up by delegates at the Office International d'Hygiène Publique (OIHP), and were modified in 1944 by UNRRA¹

Under Article 21 (a) of its Constitution, WHO is responsible for carrying out this task, which when accomplished will provide a means for ending the confusion resulting from the adherence of various countries to conflicting sanitary conventions. The need for revising the old regulations is particularly urgent because certain quarantine restrictions are of doubtful value and hinder international communications. Moreover, certain health administrations have a tendency to demand information, for example vaccination certificates the value of which is now questioned.

The basic principles of the new international sanitary regulations were laid down by the Expert Committee on International Epidemiology and Quarantine in November 1948². The preamble and the commentary on the basic principles were written by Dr Dujarric de la Rivière³. The final text with the amendments suggested by the expert committee was approved by the Second World Health Assembly⁴.

Since then considerable progress has been made. The Expert Committee on International Epidemiology and Quarantine at its second session, held in Geneva from 5 to 14 December 1949⁵ revised the draft international sanitary regulations, which will enter into force after the final text has been approved by the World Health Assembly. WHO will then have accomplished a work of paramount importance which will have a considerable effect on international relations.

Dujarric de la Rivière R. (1948) *Proposals for the International Sanitary Regulations*. Paris p. 231.

Off Rec World Health Org 19 7 *Chron World Health Org* 1949 3 1

Off Rec World Health Org 19 12

⁴ *Off Rec World Health Org* 21 22 328 *Chron World Health Org* 1949 3 194

The following took part in this session

Members

Dr R. Dujarric de la Rivière, Sous-Directeur de l'Institut Pasteur, Paris, France

Dr G. L. Dunnahoo, Medical Director, Chief Division of Foreign Quarantine (US Public Health Service), Washington, D.C., USA

Dr G. D. Hemmels, Inspector of Public Health, Utrecht, Netherlands

Dr M. D. Mackenzie, Principal Medical Officer, Ministry of Health, London, United Kingdom

Dr J. D. McCormack, Deputy Chief Medical Adviser, Department of Health, Dublin, Ireland

Dr M. T. Morgan, Président du Comité permanent de l'Office International d'Hygiène Publique, Port of London Authority, London, United Kingdom (*Chairman*)

Dr M. Nazif Bey, Under Secretary of State, Ministry of Public Health, Cairo, Egypt

Dr K. C. K. E. Raja, Director-General of Health Services, New Delhi, India

Compilation of the Draft International Sanitary Regulations

The drawing up of the text of the draft international sanitary regulations as submitted to the Executive Board was made possible by carrying out extensive preliminary investigations and by referring to the most recent scientific data. The latter were supplied by the work of the expert committees and study groups on cholera, yellow fever, plague, insecticides and environmental sanitation which has been reported in the *Chronicle*. Other fundamental work had already been carried out particularly on smallpox, on the inspection of anti yellow fever vaccine, bills of health etc.⁶ and on improving the system of epidemiological notification.⁷ Consequently it was possible to study the draft of the revised international sanitary conventions in the light of this fresh knowledge had thrown on the epidemiology, etiology and prophylaxis of pestilential diseases. All this new information acquired during recent years clearly shows that many articles in the old conventions are now out of date or invalid.

In addition to the work that has been mentioned, the expert committee considered draft international sanitary regulations drawn up by its chairman Dr M. T. Morgan in collaboration with Dr M. Gaud, Directeur Office International d'Hygiène Publique. This study also included draft supplementary regulations to be applied to the Red Sea area during the season of the Mecca pilgrimage. Various suggestions and observations concerning the revision of the conventions were also made by governments and by the International Civil Aviation Organization. These comments may be divided into four classes: (1) general observations; (2) observations connected with an article in the draft regulations; (3) observations relating to the pilgrimage; (4) observations referring to sanitary conditions in connexion with the movements of certain groups of travellers. The expert committee also noted the recommendations made on its behalf.

Dr G. H. d. Paula Soza, Director and Professor of Faculty of Hygiene and Public Health, University of São Paulo, Brazil.

Representative of the United Nations.

Professor of Biology and Director of Transport and Communications, Lake Success, N.Y., U.S.A.

Obituary.

ICAO.

Dr J. Moitt, Chief of the Section on International Civil Aviation Organization, Montreal, Canada.

Dr F. d. Taet, Medical Adviser, International Civil Aviation Organization, Montreal, Canada.

Dr M. G. d. Directeur de l'Office International d'Hygiène Publique, Paris, France (Representative of the ICHP/WHO Study Group).

PASB.

Dr F. L. S. p. e. Director, Pan American Sanitary Bureau and Director, WHO Regional Office for the Americas, Washington, D.C., U.S.A.

Secretariat.

Dr Y. M. B. d. Directeur, Division of Epidemiology, WHO (Secretary).

Dr W. Om. Epidemiologist, WHO Regional Office for the Eastern Mediterranean, Alexandria, Egypt.

Dr G. St. r. t. Chief Sanitary Consultant, Quarantine Section, WHO (Secretary of the Quarantine Study Group).

Dr W. W. Y. g. Director, WHO Epidemiological Intelligence Section, Singapore.

Dr H. S. G. Deputy Chief Health Officer for the Union of South Africa, Cape Town, Union of South Africa.

Chronicle of Health Organization 1947 1: 146, 1948 2: 137, 25, 255.

Chronicle of Health Organization 1948 2: 36, 1949 3: 35, 92.

**FIG 2 EXPERT COMMITTEE ON INTERNATIONAL EPIDEMIOLOGY
AND QUARANTINE SECOND SESSION I**



Left to right Dr F L Soper (PASB) Dr M T Morgan (Chairman) Dr Y M Biraud WHO
Dr G Stuart (WHO)

by the following WHO expert committees and study groups which met during 1949 Expert Committee on Insecticides (10 15 May) Expert Committee on Plague (19 24 September) Joint OIHP/WHO Study Group on Cholera (18 19 November) and Yellow Fever Panel (1 6 December)

Yellow Fever

Before the meeting of the Expert Committee on International Epidemiology and Quarantine the Yellow Fever Panel met in Geneva from 1 to 6 December 1949 to determine the present position of yellow fever with regard to quarantine and preventive measures Their findings have been summarized elsewhere in this issue ⁸

Plague

Among the factors considered in connexion with quarantine measures against plague the following should be mentioned specially the delimitation of endemic areas the possibility of exterminating reservoirs and vectors of plague in seaports and airports the preventive treatment of pneumonic plague and the possibility of disinfecting rice The report

on the first session of the Expert Committee on Plague formed a basis for the study of these subjects⁹

Cholera

The study of endemic areas and that of the connexion between epidemic outbreaks of cholera is continuing. In India endemic areas have already been defined and many factors causing the endemicity of cholera in that country have now been ascertained. The Joint OIHP/WHO Study Group on Cholera made recommendations concerning the elimination of the endemic foci at a later stage¹⁰

Environmental Sanitation

It is obvious that water pollution, lack of food hygiene, the presence of insect or animal vectors of communicable diseases and other deficiencies with regard to sanitation favour the spread of pestilential diseases. It follows therefore that WHO by its work on environmental sanitation can play an important part in exterminating these diseases. In fact as

FIG 3 EXPERT COMMITTEE ON INTERNATIONAL EPIDEMIOLOGY AND QUARANTINE SECOND SESSION II



Left to right (seated round table) D. F. de Taél (ICAO), P. de Balleaigue (United Nations), Dr G. H. de Paiva Souza, Dr M. Gaud (OIHP), D. K. C. K. E. Raja, Dr R. D. J. de la Rivière, D. F. L. Soper (PASB)

Dr H S Gear stated in a document submitted to the committee quarantine barrier methods are of very limited value and resistance of a community to infection is dependent upon its internal conditions

Insecticides

The Expert Committee on Insecticides¹¹ gave technical advice on international specifications for insecticides and on the design of spraying equipment. Standard methods for the disinsection of ships and aircraft were also suggested. The role of insecticides in the control of flies was studied as well as the measures necessary to prevent the introduction of anophelines into non infested areas.

Revised Draft International Sanitary Regulations

The revised text of the draft international sanitary regulations, which has been presented to the Executive Board will be passed to Member States and to interested international organizations for comments and will then be submitted to the World Health Assembly for final approval. The regulations will be put into force during the six months after this final approval has been given. The draft, as amended by the Expert Committee on International Epidemiology and Quarantine contains a list of definitions of the special sanitary and epidemiological terms mentioned in section I. The second part comprises the articles dealing with the maritime and aerial conventions. The sanitary regulations applicable to the Red Sea area during the season of the Mecca pilgrimage are contained in a separate document which also provides information on the safety and sanitary standards necessary for the protection and welfare of the pilgrims during transport by sea and air.

Once they have been adopted the WHO regulations relating to the international control of epidemics should remain in force for a fixed period, such as five years without amendment, so that the confusion which would be caused by frequent changes may be avoided and also to enable the officials responsible for their application to become familiar with the regulations. For this reason the committee was of the view despite the opinion expressed by the First World Health Assembly that the clauses relating to the sanitary inspection of the Mecca pilgrimage should not be incorporated in the basic regulations.

Second Session of the Quarantine Section

The Section on Quarantine of the Expert Committee on International Epidemiology and Quarantine—composed of Dr Dunnahoo (Chairman)

¹¹ *Chron. World Hlth Org.* 1949 3 153

Dr Mackenzie Dr Nazif Bey Dr de Paula Souza and Dr Raja—met in Geneva on 13 December 1949 Since the first meeting¹ about twenty complaints had been submitted by governments regarding measures imposed by other governments in excess of the provisions of the present international sanitary conventions The Section on Quarantine noted that the Secretariat had dealt adequately with the majority of these problems At this meeting other questions were also considered as a result the validity of certificates for inoculation against yellow fever issued in the prescribed manner by military doctors was recognized and the right of every government to prescribe the disinsection treatment it considers necessary for aircraft was acknowledged Travellers coming from an area free from *A. aegypti* and visiting a sanitary airport in a yellow fever area on their way to an area considered to be exposed to infection i.e. infested with *A. aegypti* should not in the opinion of the Section on Quarantine be obliged to produce a certificate of inoculation against yellow fever If however there is some doubt as to whether the sanitary airport is infested with *A. aegypti* the certificate if demanded should have a duration of validity identical with that prescribed by the International Sanitary Convention for Aerial Navigation 1944 that is from ten days to four years after the date of inoculation Finally with regard to deratting certificates it was decided that if seven months had elapsed since a deratting certificate was issued the health authority of the port in question would have the right to submit a ship to further deratting

The report on the second session of the Expert Committee on International Epidemiology and Quarantine as well as that of the Section on Quarantine will be published shortly as *World Health Organization Technical Report Series* no 20

YELLOW FEVER AND ENDEMIC AREAS

Members of the Yellow Fever Panel met in Geneva from 1 to 6 December 1949¹ to advise the Expert Committee on International Epidemiology and Quarantine which is responsible for drafting the new WHO sanitary regulations for the five pestilential diseases (plague, cholera, yellow fever, typhus and smallpox). The experts examined the present position regarding yellow fever endemicity with a view to making the preventive and quarantine measures as tolerable as is consistent with the protection of public health.

In South America and especially in Brazil, as reports presented to the panel by Dr W. S. Sá Antunes and Dr F. L. Soper clearly show, intensive campaigns in conjunction with the Pan American Sanitary Bureau, with insecticides with residual action have led to the elimination from urban centres of the yellow fever vector, *Aedes aegypti*. These achievements made it possible to envisage in the near future the disappearance of this mosquito from the entire country.

The position in Africa is less satisfactory. The panel recommended that campaigns should be undertaken in this continent for the extermination of the yellow fever vector and that WHO should provide technical and financial assistance to any health authorities concerned who might desire it. It is possible however that such campaigns can be carried out successfully only in those areas where *Aedes aegypti* is not a forest dwelling mosquito.

Enzootic and Endemic Yellow Fever

The progressive destruction of *Aedes aegypti* in South America has reduced the danger of urban epidemics to a minimum and makes it possible to contemplate the eradication of yellow fever from all inhabited areas. It is impossible however, to expect the final and complete disappearance of this disease. It does in fact exist in enzootic form among certain jungle animals (jungle yellow fever) in areas where *Aedes aegypti* is not present and where it may nevertheless occasionally be transmitted to man (wood cutters, hunters, etc.). This possible source of infection therefore, must always be borne in mind when considering the epidemiology of yellow fever.

The following were present:

Members

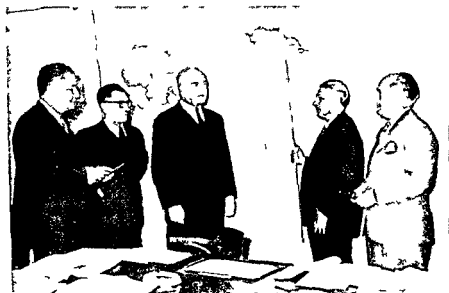
- Dr W. S. Sá Antunes, Director, National Yellow Fever Service, Ministry of Education and Health, Rio de Janeiro, Brazil.
- Dr G. L. Dunnahoo, Medical Director, Chief, Division of Foreign Quarantine (US Public Health Service), Washington, D.C., USA.
- Dr A. F. Mahaffy, formerly Director, Yellow Fever Research Institute, Entebbe, Uganda (Chai man), Médecin-Chef, G. Saleh, Adjoint technique du Directeur du Service de Santé coloniale, Ministère de la France d'Outre-Mer, Paris, France.

Secretaries

- Dr C. Stuart, Chief, Sanitary Conventions and Quarantine Section, WHO.
- Dr Y. M. Braud, Director, Division of Epidemiology, WHO, and Dr F. L. Soper, Director, Pan American Sanitary Bureau, and Director, WHO Regional Office for the Americas, Washington, D.C., USA, also attended.

The report on the session will be published shortly as *Weekly Health Organization Technical Report Series*, no. 19.

FIG 4 YELLOW FEVER PANEL FIRST SESSION



Left to right Dr F L Soper (Regional Director WHO) Médecin Colonel G Saleun D A F Mahaffy (Chairman) Dr W S Sá Antunes Dr G L Dunnahoo

Observations made in South America over a period of many years show that it is possible to distinguish four types of areas where yellow fever exists

- (1) *enootic areas* where *Aedes aegypti* is not present but where the virus exists and persists among animals for long periods causing from time to time accidental cases in man
- (2) *epizootic areas* in which *Aedes aegypti* is not present but where the disease appears in animals from time to time for short periods
- (3) *endemic areas* in which *Aedes aegypti* is present and where the virus exists and remains for long periods and where its transmission from man to man is therefore possible
- (4) *epidemic areas* in which human cases due to the transmission of the virus by *Aedes aegypti* occur

Delimitation of Endemic Areas

The endemic areas to which quarantine measures are permanently applied were delimited by UNRRA in 1946 ² as laid down by the International Sanitary Convention for Aerial Navigation 1944. It now devolves

upon WHO to give practical effect to this delimitation on the lines of the recommendations of the Yellow Fever Panel. These recommendations are based on various criteria.

For America they are based on reported clinical cases, on the results of the systematic examination of liver specimens taken from all persons dying after a febrile illness lasting ten days or less, on immunity tests carried out with human and animal sera and on the *Aedes aegypti* index³.

For Africa, they are based mainly on the results of immunity tests.

The delimitation set up in 1946 was re-examined during this session and the panel suggested various modifications. In all cases where towns and ports are excluded from endemic areas, the condition was expressly made that the *Aedes aegypti* index should not exceed 1% and that a quarterly report on the subject should be sent to WHO. A zero index is desirable, and has been attained in South American ports.

America

The panel considered that the port of Manaus (Brazil) should be excluded from the endemic area. On the other hand, the rural areas of the whole Republic of Panama and of the Panama Canal Zone (excluding the ports) should be included therein.

Africa

The endemic area which extends from latitude 15°N to latitude 10°S, i.e. over almost the whole of tropical Africa, should be left as originally defined by UNRRA until as was the case of South America further research on the distribution of the virus and its vectors permits more exact determination of the yellow fever endemic areas in this vast territory. It would then be possible to adapt quarantine measures more exactly to cover the actual risks of infection. Nyasaland and the territory to the south of Barotseland lying between longitudes 23°E and 25°E and as far as latitude 21°S should be incorporated in the endemic area. On the other hand conditions at the port of Jibuti (French Somaliland) are such that it may be excluded. In its request for exemption the French Government pointed out that not a single case of yellow fever had been observed in the town for 55 years and that very strong measures have been taken by the health services to ensure effective control throughout the whole of the surrounding territory.

Certificates of Inoculation against Yellow Fever

After specifying various measures to be taken in connexion with sanitary conditions at airports and quarantine measures applicable to aircraft

³ The *Aedes aegypti* index gives the percentage of dwellings that are inhabited by a single family in which *Aedes aegypti* larvae are found. Computation of the index is to be based on an examination of all dwellings in a port city or area.

ships and other vehicles as well as to the passengers the experts examined the question of certificates of inoculation against yellow fever. They felt that the certificates should be recognized as valid from the tenth day to the end of the sixth year following inoculation. These figures ensure an adequate safety margin since it has been shown that effective immunity becomes established as early as the seventh day after inoculation and that it lasts more than six years.

Furthermore the experts suggested that the certificate of immunity against yellow fever introduced by UNRRA be abolished. In point of fact the International Sanitary Convention of 1944 amending that of 1926 provided that a certificate of immunity could be accepted instead of an inoculation certificate. This certificate of immunity had to be issued by an approved laboratory to persons recognized as being immune as the result of an attack of yellow fever. However it is practically never requested by those concerned. Moreover it is impossible for laboratories to distinguish the immunity established as a result of inoculation from that conferred by the disease. Finally there is no known contraindication to the inoculation of immune persons. For all these reasons abolition of the certificate of immunity seems to be justified.

MALARIA CONTROL IN ISRAEL

Professor G. G. Mer, Chief Antimalaria Service of the Government of Israel and Director Malaria Research Station Rosh Pina, has reported the results obtained since 1945 by the malaria control campaign to the WHO Eastern Mediterranean Regional Committee which met in Geneva from 12 to 15 October 1949 and to the Expert Committee on Malaria.

Among the Jewish population in the Israel portion of Palestine consisting of old settlers and new immigrants the incidence of malaria was 1 207 in 1945, 466 in 1946 and 226 in 1947. During this period the population was 600 000. In 1948 the population increased by 150 000 and 1 227 new cases of malaria were recorded.

The methods used in malaria control have been gradually expanded since 1945 through the application of DDT and the use of proguanil (paludrine). DDT has been applied as a larvicide and insecticide. Proguanil has been used since 1948 as a clinical suppressive agent.

In his report Professor Mer makes some observations on these different methods of malaria control. He is of the opinion that a 1–2.5% solution of DDT in kerosene is very effective as a larvicide provided the application is repeated every 15 days during the summer. A 5% solution of DDT in kerosene sometimes with 0.5% sesame oil added was used for disinsecting dwellings. 1 g of DDT applied per square metre. It was found that the

application of DDT as an insecticide effected a decrease in the occurrence of *Anopheles sacharovi*, but a similar reduction was not observed in the case of *A. superpictus* or *A. sergentii*

Suppressive treatment with proguanil proved effective and is capable of checking a malaria epidemic in 2 weeks if the individual doses of the drug are adequate that is, 0.2 g administered twice a week. Doses of 0.1 g were insufficient for preventing all cases of falciparum infection and for suppressing all vivax infections. The curative effect of proguanil in both falciparum and vivax infections was generally poor compared to that of quinine or mepacrine taken with or without plasmoquine

Reports from WHO Fellows

Many of the letters and reports received from WHO Fellows have been of such interest that they deserve to be read by a wider public. They demonstrate more vividly than a series of facts and figures both the character of the fellowship programme and the response of the Fellows themselves. Selections from these reports have therefore been published from time to time but it must be emphasized that the opinions expressed therein are those of the Fellows themselves.

Production of BCG at Copenhagen

Dr G. A. Villarreal, Chief of the BCG Clinical Control Service of the National Committee for the Control of Tuberculosis in Mexico, has had an opportunity of studying the production of BCG at the State Serum Institute, Copenhagen. In the report he has submitted, Dr Villarreal describes the various stages of production and stresses the care taken by the institute to obtain a high-quality vaccine.

In view of the fact that BCG cannot either be heated or mixed with an antiseptic, it has to be prepared with the utmost care in order to avoid contamination and to ensure that its potency is stable and adequate. The BCG Department of the State Serum Institute, Copenhagen, takes every possible precaution to achieve this. Before engagement the staff undergo a thorough chest examination which is repeated every three months. They are forbidden to enter the laboratories where work is in progress on virulent strains of tubercle bacilli. The whole of the staff works with a sense of responsibility, observing the strictest discipline and the most rigorous aseptic rules.

The vaccine is prepared in a special building apart from the rest of the institute and the animals used for testing are likewise isolated. Equipment is carefully sterilized and is subjected to strict inspection. The room where the vaccine is prepared is provided with eight ultraviolet lamps for an area of 5m x 5m which give an adequate sterility margin to the whole room. These lamps are always switched on for 15 minutes before any work is begun.

The vaccine prepared at the institute is intended for intradermal administration. It contains 0.75 mg of bacilli per millilitre of diluted Sauton medium. It is prepared once a week and is stored in a refrigerator at a temperature of 2 to 4 C.

The strain of BCG which is used in the State Serum Institute was obtained from the Institut Pasteur Paris in 1931. During the first 10 years the culture was subcultured in bile potato broth with transfers to glycerine potato broth and finally to liquid Sauton medium. At the present time subculturing is usually carried out directly in Sauton's medium the transfer to bile potato broth being made only after 100 to 150 passages through the former medium.

The vaccine itself is prepared from the cultures in Sauton's medium. The age of the culture has a great influence on the potency of the vaccine. If the culture is young the potency of the vaccine will be low. If on the other hand it is old the potency will be even lower owing to the presence of many dead bacilli. Fourteen days seem to be the optimum growing period for the cultures then contain the highest number of living bacilli. Before the vaccine is prepared the cultures are examined to make certain that the liquid is clear the bottles containing the cultures are then shaken and their contents are poured into a filter (Birckhaug apparatus). The mass of bacilli is pressed by the piston of the apparatus and has the appearance of an almost dry cake. After various operations have been performed the culture is weighed and is then transferred to a sterile Fernbach flask containing 2.5 kg. of stainless steel balls of 4-mm. diameter. The quantity of BCG obtained is usually between 5 and 10 g. per flask. The flasks are then placed in an electric rotator which revolves at 40 r.p.m. in order to disintegrate the mass of bacilli and produce a homogeneous suspension. 20 ml. of diluted Sauton medium are then added. The duration and speed of the rotation have an effect upon the quality and potency of the vaccine. If the rotation is of too short duration the emulsion will still contain lumps. If on the other hand it is continued for too long the bacilli will be impaired and partly destroyed and the resulting vaccine will have a low potency. The optimum time of rotation is six minutes. In order to obtain the stock suspension a sufficient quantity of diluted Sauton medium is added until the suspension contains 40 mg. of bacilli per millilitre. From this suspension the vaccine is prepared by adding diluted Sauton medium so that the liquid finally contains 0.75 mg. of bacilli per millilitre. It is then put into ampoules.

At various stages during its production the vaccine is submitted to a sterility test (for aerobic and anaerobic micro organisms). The potency of the vaccine is then estimated since being a suspension of living bacilli the vaccine cannot be standardized. It follows therefore that production of the vaccine at its various stages must be made as uniform as possible if a stable potency is to be obtained. The ideal vaccine is one that can cause anergic persons to react to the tuberculin test without giving rise to any complications. If the vaccine contains less than 0.75 mg. of bacilli per millilitre it will have a low potency. It will give a less certain immunity and for a shorter period than the normal vaccine. Should it contain more bacilli per millilitre its potency will be greater. A vaccine with a very high potency may cause strong local reactions such as abscesses which although not serious may in the long run discredit BCG. The BCG department therefore recommends that great care should be taken to weigh the bacilli as accurately as possible. For this the cultures must be dried sufficiently before being weighed. Four dilutions of the vaccine in decreasing strengths are tested by inoculation into four white guinea pigs each weighing 450 grams. The local reactions after intradermal inoculation should be measured twice a week and this observation should be continued until the nodules have disappeared.

From the very beginning of the production of BCG innocuity tests have been carried out systematically on guinea pigs at the Copenhagen institute with the object of detecting both virulent tubercle bacilli and other pathogenic organisms. These tests have shown that BCG is a stable organism which is unable to give rise to general tuberculosis.

The content of viable bacilli in the vaccine is determined from the number of colonies appearing on Lowenstein's medium after six weeks of incubation. The homogeneity of the suspension is also examined.

The laboratory is kept informed by the antituberculosis dispensary of the reactions to and results of BCG inoculations. Dr Villarreal himself was able to perform most of the tests which he describes in his interesting report.

WHO Publications

Epidemiological and Vital Statistics Report

Contents of numbers of the *Report* published since the last listing¹ follow

- Vol 1 No 18 (November 1948)* Malaria in Europe 1938-1947 by E. Pampana
Table Malaria
- Vol 1 No 19 (December 1948)* The declining death rate by K. Stowman. Tables
General death rates in some countries. General death rates in large towns. Tuberculosis mortality
- Vol 2 No 1 (January 1949)* Syphilis and gonorrhoea in Germany by T. Guthe
Tables Syphilis. Gonorrhoea (gonococcal infections)
- Vol 2 No 2 (February 1949)* The 1948/49 influenza wave in Europe by G. Stuart.
Tables Influenza. Undulant fever. Relapsing and tick fevers
- Vol 2 No 3 (March 1949)* Tables Birth rates in some countries. Birth rates in large towns. Infant mortality rates in some countries. Infant mortality rates in large towns
- Vol 2 No 4 (April 1949)* Evolution of mortality in Europe during the twentieth century by M. Pascua. Table Smallpox
- Vol 2 No 5 (May 1949)* Tables Cholera. Yellow fever. Typhus fever. Dysentery
- Vol 2 No 6 (June 1949)* Tables Whooping cough. Diphtheria
- Vol 2 No 7 (July 1949)* Tables General death rates in some countries. General death rates in large towns. Tuberculosis mortality
- Vol 2 No 8 (August 1949)* Prevalence of plague in the world in recent years by P. M. Kaul. Table Plague
- Vol 2 No 9 (September 1949)* Tables Measles. Scarlet fever. Cerebrospinal meningitis
- Vol 2 No 10 (October 1949)* Deaths by cause, sex and age in Europe by M. Pascua (with detailed tables)

Official Records of the World Health Organization

Two numbers of the *Official Records* were published in December 1949

No 21 Second World Health Assembly This number is divided into three parts. Part I contains the decisions and resolutions adopted. Part II contains the report of the proceedings subdivided into verbatim records of the plenary meetings, minutes of the General Committee and main committees and committee reports. Part III contains 24 annexes comprising detailed reports on specific subjects, notes and comments submitted by delegations, texts of agreements, etc.

No 22 Report of the Executive Board fourth session In addition to the report on the work of this session and relevant annexes, this number contains in the form of a supplement reports on the three sessions of the Joint Committee on Health Policy, UNICEF/WHO.

Notes and News

Dr Raymond Gautier Leaves WHO

At the beginning of this year Dr R. Gautier retired from the post of Assistant Director General of WHO. In March he will assume the functions of Research Director for the International Children's Centre in Paris.

Dr Gautier was born in Geneva on 7 January 1885. After graduation as Doctor of Medicine from the University of Basle, he was appointed assistant in the Institute of Pathological Anatomy of that University in 1918 and first assistant in the Laboratory of Physiology, University of Geneva, in 1920. He received the Bizot award for his research on the cerebrospinal fluid and specifically for having enunciated the concept of the blood-brain barrier.

In 1923 and 1924 he was Chief of Operations at the Institut d'Hygiène et de Bactériologie, University of Geneva. It was there that he undertook original research on, among other subjects, bovine fluorosis in relation to the emanations of aluminium works.

In 1924 Dr Gautier joined the Health Organization of the League of Nations, where he was concerned with biological standardization. From 1926 to 1930 he occupied the post of Director of the Eastern Office, League of Nations Health Organization, at Singapore. He took an active part in combating the cholera outbreak at Shanghai in 1928 and in establishing a radio-epidemiological information service. He was also the initiator of a series of epidemiological and immunological studies.

After his return to Geneva in 1930, he devoted his full time to biological standardization for the next eight years. The two studies which he published in 1935 and 1946 provide a résumé of all that had been done in this field and are considered as reference works of permanent value.¹

In 1939 he was appointed Acting Director of the Health Section of the League of Nations, in which post he remained until 1942. From then until the end of the war, Dr Gautier was entrusted with a series of important missions to London and Washington for the purpose of organizing health measures in liberated Europe.

When the Interim Commission of the World Health Organization was established in 1946, Dr Gautier was appointed Counsellor and later Director of the Geneva

FIG. 5. DR R. GAUTIER



Office. In 1948 he became Assistant Director General of the permanent Organization. Dr Gautier is the author of numerous medical works dealing specifically with questions relating to the epidemiology of scarlet fever and cholera to pituitary tumours peroral vaccination tropical pneumonia preventive vaccination of dogs against rabies bacteriophages etc. He is a Member of the Senate of the Académie suisse des Sciences médicales and Honorary Member of the Epidemiological Section of the Royal Society of Medicine London.

The International Children's Centre in Paris where Dr Gautier will continue his career is a new foundation of the French Government which according to its statutes has as its objective the promotion in the different countries of the world of the study of problems pertaining to infancy the propagation of knowledge on hygiene and child welfare and the technical training of specialized personnel. The centre is available to the specialized agencies and services of the United Nations as well as to various national institutions for the protection of mothers and children.

In announcing his colleague's departure to the WHO Executive Board Dr Brock Chisholm WHO Director General said: "We are losing a loyal co-operative and highly skilled colleague." The Executive Board unanimously expressed its deep appreciation of Dr Gautier's long and eminent service in international health and especially of his work in the World Health Organization.

World Health Day

The Second World Health Assembly decided that World Health Day should be observed on the anniversary of the entry into force of the WHO Constitution following its ratification by 26 States Members of the United Nations (7 April 1948). Various suggestions have been made by the WHO Director General to governments regarding the organization of programmes for this day. The list of suggestions has been drawn up partly on the basis of reports from various countries regarding programmes organized in 1949.

The theme which has been proposed by the Director General for 1950 is "Know Your Own Health Services." This theme brings together the national and international aspects of public health work. It will encourage people to study their own health problems and the services which are coping with them; will assist them to determine what contribution they themselves can make towards improving their health and will enable them to become informed concerning the work being carried out by national health authorities and by WHO.

The celebration of World Health Day might possibly be combined with the special health days or health weeks which some countries devote to health problems; all that would be necessary would be to have the two celebrations coincide.

An information kit containing background material to serve as a basis for organizing World Health Day programmes is being prepared. Among the suggestions already sent to governments is information on the co-operation which national health administrations can obtain from different institutions and associations: educational centres the press radio etc.

Two Women Specialists Appointed WHO Expert Consultants

Two women specialists who have been appointed expert consultants of the World Health Organization left Geneva on 19 December 1949 to carry out the tasks with which they have been entrusted. They are Dr Pearl Kendrick, chief of the Western Michigan Laboratory, one of the branches of the Department of Health of Michigan and Mrs Lucia Moholy, formerly Director, Aslib Microfilm Service, Victoria and Albert Museum, London.

Dr Kendrick went to London at the request of the United Kingdom Ministry of Health to assist in organizing mass vaccination campaigns against whooping cough. This disease presents serious problems in Britain where it causes more deaths among children than does diphtheria. In England and Wales 748 fatal cases were registered in 1948 and 217 were recorded in the first quarter of 1949. Dr Kendrick is the first WHO expert whose services have been requested by the United Kingdom.

Mrs Moholy has visited Prague to collaborate with the Czechoslovak Government in establishing documentation and microfilm services at the State Medical Library. Once these services are organized they will be available to other countries of eastern Europe.

Venereal Diseases

India

A number of points in the December 1949 report of the WHO venereal disease demonstration team in India¹ are of interest.

First of all the proportion of sero positivity is remarkably high, the adult rate being about 70%. Cases of syphilis in the early infective stage are numerous. Cases of clinically diagnosed granuloma inguinale are more common in women. It is interesting to note that cases of acute gonorrhoea in men are rare. The general state of health of the population is precarious and reveals the lack of medical attention.

On 3 December the programme of mass treatment in the Ghund area was completed. Those suffering from syphilis had been given procaine penicillin G in oil with 2% aluminium monostearate. The response of the people themselves deserves comment. Although they had been informed by the authorities of the details of the campaign and the benefits they might derive from it they were very suspicious. Hence at the start there were not many patients. The results of treatment in those suffering from early syphilitic lesions or even common impetigo became apparent about the third day so that confidence was rapidly established. From then on the population showed its approval by flocking to the treatment centre. Dr J. Kvittingen, returning to the area one month after the campaign had started, was unable to discover any fresh case of venereal disease whereas previously some 15 to 20 new cases were detected every month.

Finland

A venereal disease specialist Dr M. Tottie of Stockholm has left Geneva for Helsinki where he will take part in the anti venereal disease campaign that has been launched in Finland by the United Nations International Children's Emergency Fund (UNICEF) and WHO. He is to make a special study of the methods of treatment and prevention of congenital syphilis.

Inoculation and Vaccination Certificates

WHO has recently published a *List of Countries Inoculation and Vaccination Certificate Requirements* as on 1 December 1949.²

There is no provision in the international sanitary conventions now in force for making vaccination or inoculation against plague, cholera, yellow fever, typhus or smallpox compulsory. However for some years such certificates have been demanded by certain countries from travellers coming from infected, suspect or even healthy areas. An investigation undertaken by WHO in September 1948 among the health administrations of every country has enabled data to be obtained from 108 countries or territories.

¹ See CH. H. Kendrick, *WHO Weekly Dig.* 1949, 3, 294.

² See also the *WHO Weekly Dig.* 1950, 25, No. 2. This publication may be obtained from the WHO Library, Geneva, Switzerland. Price 1 Swiss franc, postage free.



FIG 6
WHO VENEREAL
DISEASE DEMON
STRATION TEAM
IN INDIA I

Taking blood sampl
from patients at a re
hospital near Simla

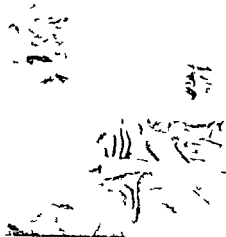
FIG 7 WHO VENEREAL DISEASE
DEMONSTRATION TEAM IN INDIA II

Giving an anti venereal-disease injection



FIG 8 WHO VENEREAL DISEASE
DEMONSTRATIO M IN INDIA

Taking a



It is obvious that WHO does not necessarily approve of all the measures that have been enforced. Its aim is simply to make known the existing state of affairs.

The position will doubtless be modified after the publication of the new WHO international sanitary regulations which have recently been drafted by the Expert Committee on International Epidemiology and Quarantine¹.

Training for Antituberculosis Work in Turkey

An antituberculosis training-centre is to be set up in Turkey with the assistance of WHO. Dr E Berthet, tuberculosis officer of the Department of Isère, France, has been made responsible for the organization of the centre, which will be concerned with prophylaxis, with methods of diagnosis and with the treatment of tuberculosis. Equipment will be provided by WHO. The setting up of this centre will mark the launching of a large scale programme of tuberculosis control in Turkey.

WHO Sends Nurses to Borneo and Korea

Five nurses left Geneva on 23 January 1950 for Borneo and Korea. They will assist in carrying out maternal and child health programmes.

Miss I Simmons and Miss P Scanlan are going to Brunei, while Miss H Wenger and Miss O Warren have been posted to Sarawak, both these territories are situated in the north west of the island of Borneo.

Miss W Visscher is going to South Korea and will form part of a team headed by Dr E Leppo, a member of the WHO Secretariat.

Poliomyelitis in India

In order to check the epidemic that has broken out in India, a team of WHO specialists in the treatment and rehabilitation of poliomyelitis victims has left for that country². The team is made up of Dr N Kezerian, Assistant Resident Orthopaedic Surgeon, Johns Hopkins Hospital, Baltimore, USA, Mrs H Kezerian, a nurse at the same hospital, and Miss S A Bruton, a physiotherapist attached to the Maryland League of Crippled Children.

Homeless Children

Dr J Bowby, Director of the Child Guidance Department of the Tavistock Clinic, London, has been appointed by WHO to study the problem of homeless children. Dr Bowby left Geneva on 16 January 1950 for Paris, Amsterdam and Stockholm, where he will visit various institutions and reception centres. He will collect scientific data on the effects of loss of parents or home on the mental health of children.

¹ See page 46.

² See *Child Health* 1949, 3, 92.

WORLD HEALTH ORGANIZATION

TECHNICAL REPORT SERIES

(Separate editions in English and in French)

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1 Expert Committee on the Unification of Pharmacopoeias report on the fourth session	9d \$0 10
2 Expert Committee on Biological Standardization report on the third session	1/6 \$0 20
3 Expert Committee on Biological Standardization report of the Subcommittee on Fat Soluble Vitamins	9d \$0 10
4 Expert Committee on Insecticides report on the first session	<i>To be published</i>
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8 Expert Committee on Malaria report on the third session	
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12 Expert Committee on the Unification of Pharmacopoeias report on the fifth session	
13 Expert Committee on Venereal Infections report on the third session	
14 Expert Committee on Venereal Infections report of the Subcommittee on Serology and Laboratory Aspects	<i>To be published</i>
15 Venereal Disease Control in the USA report of the WHO Syphilis Study Commission	
16 Joint FAO/WHO Expert Committee on Nutrition	
17 Joint OIHP/WHO Study Group on African Schistosomiasis report on the first session	
18 Joint OIHP/WHO Study-Group on Cholera report on the third session	
19 Yellow Fever Panel report on the first session	
20 Expert Committee on International Epidemiology and Quarantine report on the second session	
21 Expert Committee on Drugs Liable to Produce Addiction report on the second session	9d \$0 10



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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RECENT AND FORTHCOMING MEETINGS

1950

6-30 January	WHO Executive Board Standing Committee on Administration and Finance Geneva
9-14 January	WHO Expert Committee on Drugs Liable to Produce Addiction second session Geneva
16 January-2 February	WHO Executive Board fifth session Geneva
6-11 February	WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel first session Geneva
20-26 February	WHO Expert Committee on Nursing first session Geneva
27 February-3 March	WHO Expert Committee on Health Statistics Subcommittee on the Definition of Stillbirth and Abortion Paris
6-10 March	WHO Expert Committee on Health Statistics Subcommittee on Cancer Registration Paris
11-15 April	WHO Expert Committee on Antibiotics first session Geneva
11-15 April	WHO Expert Committee on Health Statistics Subcommittee on Hospital Statistics Geneva
17 April tentatively	WHO Expert Group Meeting on Prematurity Geneva
17-22 April	WHO Expert Committee on Rabies first session Geneva
18-22 April tentatively	WHO Expert Committee on Health Statistics second session Geneva
20-29 April	WHO Expert Committee on the Unification of Pharmacopoeias sixth session New York
8 May	Third World Health Assembly Geneva
June	WHO Executive Board sixth session Geneva
August	WHO Expert Group Meeting on School Health Geneva
September	WHO Regional Committee for the Eastern Mediterranean third session Ankara
September	WHO Expert Committee on Tuberculosis fifth session Geneva
September	WHO Regional Committee for South East Asia third session Colombo

VENEREAL-DISEASE CONTROL IN THE USA

Report of the WHO Syphilis Study Commission

The WHO Syphilis Study Commission has reported to the Expert Committee on Venereal Infections on a study tour made by its members to 13 States and more than 70 public health research and medical centres for syphilis control in the USA

The Commission consisted of seven members¹ and was set up in accordance with the request made by the Expert Committee on Venereal Infections during its second session that a temporary study group consisting of a limited number of outstanding venereologists from Europe and other regions be established in 1949 to evaluate the venereal disease control methods in the United States as to their effectiveness in national and international programmes.² A difference of opinion on the treatment of syphilis exists between the supporters of the traditional therapy still to some extent upheld—particularly in Europe—and the advocates of foreshortened treatment methods based on penicillin and applied on a large scale in the USA. In recommending the formation of this Commission during the second session of the Executive Board Dr Hyde pointed out that the survey could also be of value to the USA as it might serve to suggest improvements in the methods employed there.³ The report of the Commission which was extensively discussed by the Expert Committee on Venereal Infections during its third session held in Washington from 10 to 20 October 1949⁴ is summarized below.⁵

The members of the Commission were as follows:
 Dr J. M. F. Dect. R. p. d. T. m. i. C. e. t. Ch. f. v. e. e. a. l. D. S. t. P. b. l. c. H. l. t. h. S. r. v. i. c. e.
 G. t. e. m. i. C. i. t. y. G. t. m. i. (V. C. h. i. m.)
 Dr E. I. G. n. D. e. c. t. D. i. s. t. r. i. c. t. D. e. r. m. t. o. n. e. r. e. o. l. o. g. i. c. a. l. D. e. n. s. i. t. a. r. y. M. e. t. r. y. (H. l. t. h. S.) o. Y. u. g. o. s. l. a. v. i. a.
 Dr P. C. J. o. i. P. e. t. e. d. C. l. i. n. i. c. a. l. M. i. d. e. a. c. t. é. t. a. s. y. p. h. i. l. t. q. u. e. à. l. F. i. l. t. é. d. M. é. d. e. c. d. I. U. r. s. t. é. d. B. o. d. F. r. a. n. c. e.
 Dr N. J. a. g. a. l. w. i. l. l. D. p. t. y. P. b. l. c. H. l. t. h. C. o. m. m. i. s. s. i. o. n. O. f. f. i. c. e. f. D. e. t. G. n. e. r. a. l. H. l. t. h. S. r. v. i. c. e. N. w. D. e. l. h. i. I. d. a.
 Dr S. M. L. i. r. d. A. d. i. c. e. n. t. V. e. n. e. r. e. o. l. o. g. y. E. a. s. t. A. g. l. n. R. g. a. l. H. p. t. a. l. B. o. d. I. p. s. w. i. c. h. U. n. i. v. e. r. s. i. t. y. K. i. n. g. d. o. m.
 Dr P. V. M. e. r. s. e. P. h. y. s. i. c. i. a. n. G. e. n. e. r. a. l. D. i. s. e. a. s. e. C. l. i. n. i. c. M. e. d. i. c. a. l. H. o. s. p. i. t. a. l. C. o. p. e. h. g. D. e. n. m. a. r. k. (C. h. i. m.)
 Dr T. P. i. k. o. n. C. h. i. e. f. S. t. a. t. i. s. t. i. c. i. a. n. V. e. n. e. r. e. a. l. D. i. s. e. a. s. e. K. m. p. l. (H. l. t. h. S.) F. i. d. e. l. i. t. y.
 Off. R. e. c. o. r. d. H. l. t. h. O. f. f. i. c. e. 15 23
 Chro. H. l. t. h. O. f. f. i. c. e. 1948 2 251
 Chro. W. l. d. H. l. t. h. O. f. f. i. c. e. 1950 4 35
 The report of the WHO Syphilis Study Commission will be published as *W. l. d. H. l. t. h. O. f. f. i. c. e. J. o. u. r. n. a. l.*
 T. h. e. I. n. t. e. r. n. a. t. i. o. n. a. l. S. y. s. t. e. m. o. f. S. t. a. t. i. s. t. i. c. s. 15

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preparations (especially procaine penicillin with 2% of aluminium mono stearate) penicillin resistant strains of gonococci the effects of fever induced by the Kettering hypertherm method treatment with aureomycin and chloromycetin the recently developed treponemal antibody technique⁸ study of the life cycle of *Treponema pallidum* using the phase and electron microscopes false positive reactions the slide flocculation test for the diagnosis of syphilis preparation of a purified antigen trials on the therapeutic value of repository and aqueous penicillin preparations search for new antibiotics experimental syphilis especially from the immunological viewpoint etc

Other research deals with the epidemiological aspects of control and includes the comparison of various methods for case finding and contact tracing methods which employ either visiting nurses or auxiliary personnel specially trained for this task

Education

Education which forms part of all modern programmes for the control of disease is provided for the three following categories

- (a) professional and other groups working in venereal disease control
- (b) patients and
- (c) the general public

The postgraduate courses given by the schools of public health such as those at Harvard University or the Johns Hopkins University are addressed to the first group especially to doctors and sometimes to nurses Furthermore the US Public Health Service subsidizes chairs of syphilology in certain medical schools The professional groups are kept informed of scientific research by the *Journal of Venereal Disease Information* which has a monthly circulation of 15 000 copies Recently this journal has been offered free for a period of one year to all senior medical students Regional seminars held twice yearly give the professional groups an opportunity to improve their knowledge The most recent scientific subjects are dealt with during the annual meetings of the American Venereal Disease Association

As regards the patient the aim of education is to instruct him in the nature of his disease and to persuade him of the absolute necessity of continuing the treatment until cured It would clearly be preferable for this type of instruction to be individual however because of the lack of time and of qualified staff group instruction is often employed in the hospitals by means of talks illustrated with films and adapted to the intellectual level of the patients

History and Present Organization of Venereal Disease Control in the USA

Certain outstanding dates mark various stages in the development of venereal disease control in the USA. In 1876, the President of the American Medical Association suggested that boards of health in every State be given the same powers for venereal disease control as they already possessed for the control of communicable diseases in general. In 1912, the State of California required its physicians to report cases of venereal disease, and by 1917 nine other States had followed this lead. During the first World War, public interest was stimulated by the fact that venereal diseases were one of the leading causes of rejection of candidates for the armed forces. In 1917, the US Public Health Service urged health officers to require the reporting of venereal diseases by physicians so as to ensure free treatment. Furthermore the individual States were invited to establish a venereal disease control division in their health departments. In 1918 Congress approved the setting up of a Division of Venereal Disease in the US Public Health Service. In 1936 a new law provided for aid to States so that they could establish and maintain preventive and control measures. A wartime programme was instituted in 1940 and further developed in the following years. blood testing was applied to recruits and rapid treatment centres were set up throughout the country. Later treatment with penicillin and other antibiotics was instituted.

The duties of the Division of Venereal Disease of the US Public Health Service include the study of the etiology, prevention and treatment of venereal diseases, co-operation with State health departments and prevention of the spread of these diseases by the movement of infected persons from one State to another. In 1948 of a total appropriation of \$192 848 100 for health services \$17 399 500 were allocated for venereal disease control representing one half of the total sum spent on venereal disease control in the USA. The other half is provided from State local and private funds. Grants are provided by the Division of Venereal Disease of the US Public Health Service to aid States to set up their own services to finance research and for the operation of rapid treatment centres.

Research

Two types of research are undertaken: scientific and epidemiological. The Division of Venereal Disease of the US Public Health Service has a branch of laboratory and clinical research and its laboratory, the Venereal Disease Research Laboratory at Staten Island, New York, is world famous. Other institutes, supported by funds from various sources, also carry out research which includes all the venereal diseases.

The work deals with the following points among others: schedules for ambulatory treatment by means of delayed absorption penicillin.

Education of the general public which is a very important part of the control programme was started by a voluntary organization the American Social Hygiene Association and subsequently expanded by official agencies. At first the attitude of the public towards the term venereal diseases impeded these efforts. However from 1936 onwards thanks to the influence of certain public health officials the attitude of the public has completely changed and at present mass education in this field is more developed in the USA than in any other country. In certain schools lectures on venereal diseases form part of courses on human biology or domestic economy. Private and public associations make a joint effort. Thus the Social Hygiene Days organized throughout the country are utilized for the campaign against venereal disease. A recent propaganda drive in Chicago employed various media of publicity such as television radio the newspapers posters in street cars sky writing etc. A survey carried out in one city following such a campaign showed that 31% of the inhabitants were not reached 54% were slightly better informed and only 15% were really well informed. In general this propaganda gives better results with men than with women above all in the lower educational groups. The instruction which the men receive in the armed services may serve partially to explain this fact.

Epidemiological Factors in Venereal Disease Control

Among the factors playing a part in the epidemiology of venereal disease which were studied by the Commission are the notification of cases case finding and the hospitalization of patients and facilities for diagnosis and treatment.

Morbidity reporting

In order to plan a control programme it is necessary to know as accurately as possible the total number of cases and their geographical distribution. So as to facilitate the work involved in the collection of data and their classification and analysis standard forms have been drawn up in accordance with which the US Public Health Service establishes morbidity reports for the cities. In 1948 the health departments administered 3 000 dispensaries which reported about 450 000 cases. The notifications of these cases came from clinics hospitals various institutions private physicians houses of correction prisons etc. The recording and analysis of the data are undertaken in the district offices of the venereal disease-control division (e.g. in New York and Chicago) or in a centre for the mechanical tabulation of statistical data attached to the State department of health (e.g. in Georgia). Information from local and State levels is passed to the Division of Venereal Disease of the US Public Health Service where it is analysed on a nation wide basis. It is estimated that



FIG 2 WHO SYPHILIS STUDY
COMMISSION - II

FIG 1 WHO SYPHILIS STUDY
COMMISSION - I

Right to left (seated round table)
Dr J F Mahoney (Chairman WHO
Committee on Venereal Infections)
Clark (Executive Director American
Hygiene Association) Dr N Jun
Dr S Levitan (Venereal Disease
Laboratory, US Public Health &
Dr P V Marcussen (Chairman) C
Joula Dr R C Arnold (Venereal
Research Laboratory US Public Hea
vice) Dr E I Grin Dr S M Lard
Del Vecchio (Serologist US Public
Service)

The commission at the Venereal Disease
Research Laboratory Staten Island

Left to right Dr R C Arnold (Venereal
Disease Research Laboratory US Public
Health Service) Dr J M Funes (Vice Chair
man) Dr S M Lard Dr E I Grin Dr W
Clark (Executive Director American Social
Hygiene Association) Dr J F Mahoney
(Chairman WHO Expert Committee on Ven
ereal Infections) Dr P C Joula Dr P V
Marcussen (Chairman) E R Del Vecchio
(Serologist US Public Health Service)



FIG 3 WHO SYPHILIS STUDY
COMMISSION - III



Examination of follow up cards of pt
treated patients at the Venereal D
Research Laboratory Staten Island

Left to right Dr R C Arnold (V
Disease Research Laboratory US
Health Service) Dr J F Mahoney (Ch
WHO Expert Comm n Venereal
tions) Dr P V Marcussen (Ch
S Levitan
to
so Re
ary

infectious syphilis discovered) limits their general application. Consequently these examinations are at present combined with others for example chest x ray. Serological testing is compulsory in Alabama for certain age groups and most States require premarital and prenatal testing.

Diagnosis

Laboratory facilities for diagnosis are free throughout the USA and they are fully used by hospitals and clinics. Each laboratory makes routine use of one or more tests. Since the introduction of penicillin therapy the quantitative flocculation tests and to a lesser extent complement fixation tests have been extensively employed. Physicians are becoming familiar with the interpretation of the results. They have a growing understanding of the importance of false positive reactions a source of erroneous interpretation which is particularly grave when premarital and prenatal tests required by law or mass blood testing are involved. Moreover the ease of penicillin treatment may induce physicians to arrive at a too hasty diagnosis of syphilis based only on an unconfirmed or doubtful positive reaction. It is important for the medical profession to become increasingly aware of the danger of false interpretation of serological results. Certain laboratories are content to perform only one precipitation test for the diagnosis of syphilis. The Commission felt that two tests one precipitation and one complement fixation should be carried out whenever possible.

Serological tests are periodically evaluated by the Venereal Disease Research Laboratory whose conclusions are circulated to the laboratories concerned with the aim of constantly improving these tests. The Commission pointed out the desirability of such systematic comparisons between laboratories on both a national and an international basis.

Treatment

Treatment for venereal diseases is given in the State and local dispensaries the rapid treatment centres for hospitalized patients and in institutions where separate wings or a certain number of beds are reserved for patients suffering from venereal diseases. Treatment is usually free or in some cases those who are able pay a fee. No case of syphilis goes without treatment because of inability to pay. In certain States the health departments supply private physicians with antivenereal drugs. The purpose of these services is to promote closer collaboration between the health departments and the private physicians and to increase the facilities for treatment.

Although the latter appear to be adequate on the whole their distribution is not perfect for the areas of highest incidence do not always enjoy

half of the venereal disease cases are treated by private physicians. The notification of cases by the latter varies from State to State. It is of the order of 5 to 25% of the total. The Commission felt that this proportion was very low and that an effort should be made to increase it. In small communities, however, identification of patients merely by initials and date of birth might encourage doctors to report cases.

Case finding and hospitalization

The discovery of all infectious cases is also a very important epidemiological aim. In 1948 the number of cases of syphilis in all stages was about 3 000 000 for the whole population of the continental USA. 338 000 cases were diagnosed, of which only 29.7% had open lesions. 60% of the latter came for medical treatment on their own initiative and 6.8% as a result of contact investigation. Many syphilitics in the primary or secondary stage did not come voluntarily for treatment for various reasons of a psychological nature or because of lack of money, time or means of transport.

The search for contacts is a form of case finding originating from basic principles in epidemiology. Every patient suffering from early syphilis is questioned with the aim of finding individuals constituting a chain of infection, and these persons are requested to undergo medical treatment.

The success of these interrogations depends to a large extent on the tact and competence of the interviewer. Public health nurses are specially trained for this task, but their insufficient number has made necessary the co-operation of lay investigators fulfilling certain requirements and to whom a training course is given. The number of cases detected by this method steadily increased during 1944 to 1948.

Following the introduction of rapid treatment methods, the problem of hospitalization has become less acute. Inquiries made in this connexion have shown that 80% of patients follow their treatment regularly, only 35 out of 952 had to be hospitalized for not complying properly with the conditions of treatment. According to other observations, 96.6% finished a ten-day schedule without difficulty and only 2.1% broke off an eight-day schedule.

Mass blood testing

Mass blood testing makes it possible to detect cases of syphilis which have escaped other methods and to estimate the total number of cases in all stages. Thus, for example, in one of the counties of the State of Mississippi, 13 618 persons out of a population of 35 792 were examined. 1 999 cases of syphilis were discovered, including 54 with open lesions. The very high cost of these examinations (about \$500 for every case of

morbidity reporting the fact that many private physicians do not report cases and the unknown proportion of cases receiving no treatment. Consequently it is possible to draw only approximate conclusions, however a general picture can be formed.

(1) The proportion of cases observed in the civil population decreased from 3.5 per 1 000 inhabitants in 1941 to 2.3 in 1948. Statistics compiled in two States, Massachusetts and Georgia, lead to some interesting conclusions. In these two States infection with syphilis is on the decline. The number of cases with respect to the number of inhabitants is much higher in Georgia (3.49 per 1 000 inhabitants compared with 0.47 in Massachusetts). This difference is mainly due to the fact that 34.7% of the population of Georgia is negro, whereas the corresponding percentage in Massachusetts is only 1.3. However, experience has shown that for the whole USA the ratio of syphilis cases among the white to those among the negro population is 1:10. These figures show the importance of the racial factor in the general venereal disease problem in the USA.

(2) Statistics as well as the opinion of specialists expressed to members of the Commission at various centres show that early syphilis is also decreasing.

(3) The trend of early syphilis in the USA during recent years has been almost the same as in other countries such as Denmark, England and Wales and Finland—an increase during the war years reaching a maximum in 1946 (1944 in Denmark), then a decrease. The same phenomenon was observed after the first World War, although Denmark was not a belligerent. This decline in venereal diseases after the increase observed during the war years consequently appears to be natural. It is clear that the decrease in morbidity is encouraged by the facilities for treatment and the control programme at present in force.

In the opinion of the members of the Commission, facilities for treatment and active case finding measures are more important in the control of syphilis than the use of any one drug in preference to another. However, the existence of a non-toxic drug such as penicillin making rapid treatment possible is obviously a factor of major importance.

In its findings the Commission stressed that the methods applied in the USA for the control of syphilis could be successfully adapted to other areas. The use of penicillin, particularly in the form of repository preparations, methods for mass blood testing, standardized laboratory techniques and new ideas applied to the compilation of data and the analysis of statistics, case finding by means of specially trained lay personnel, the co-operation of private physicians, free diagnosis, consultative and treatment services and the epidemiological measures employed may serve as examples to other countries engaged in the campaign against venereal diseases.

the largest number of facilities. In 1948, for example 127,210 cases of syphilis were reported among the white population and 210 931 among negroes the respective rates being 98.7 and 1 375.5 per 100 000 inhabitants. As 79% of the negro population—which represents 11% of the total population of the USA—live in the southern States it would seem that facilities for treatment should be more numerous in these areas with their high syphilis morbidity rate. Since negroes emigrate from the southern States to the other States on a large scale risk of the consequent spread of venereal infection is considerable.

The Commission devoted a large section of its report to the results of penicillin therapy in the treatment of early and infantile syphilis as well as in the prevention of prenatal syphilis. These questions have been dealt with in articles published in the *Bulletin of the World Health Organization*⁷ and summarized in the *Chronicle*⁸.

Measures against Introduction of Syphilis into the USA

To prevent the introduction of syphilis by immigrants, the laws of the USA provide for the compulsory treatment of all sick persons before their admission. These regulations are not always observed and many sailors suffering from infectious syphilis enter undiscovered and receive free treatment only later in a dispensary. A number of countries have been authorized to establish their own dispensaries for seamen in US ports. This is to encourage seamen to come for treatment since they report more readily to doctors speaking their own language. A blood test is required of immigrants as well as of workers coming from neighbouring countries. These measures should be of particular interest to countries where the importation of venereal diseases is a grave public health problem.

Trend of Syphilis as Affected by the US Venereal Disease-Control Programme

Three questions arise on considering the problem of syphilis in the USA and the results of the campaign against venereal disease.

- (1) Is syphilis in all its stages decreasing?
- (2) Are early infections with syphilis on the decline?
- (3) What part has the syphilis control programme played particularly the widespread use of penicillin during the past five years?

The value of the available statistics is limited by several factors among others by the diversity of the techniques employed for case finding and

⁷ Thomas, T. W. (1949) *B. B. World Health Org.* 2: 233. 49.
⁸ *Ch. World Health Org.* 1949 3: 85.

morbidity reporting the fact that many private physicians do not report cases and the unknown proportion of cases receiving no treatment. Consequently it is possible to draw only approximate conclusions; however a general picture can be formed.

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Comments by the Executive Board

At its fifth session held in Geneva from 16 January to 2 February 1950, the WHO Executive Board considered the report of the Syphilis Study Commission and recommended that it should be given the widest possible distribution. The Board expressed considerable interest in this type of WHO activity which aims at the study of special international health problems, and was in favour of the establishment of further study commissions as a means of stimulating the exchange of information between national health administrations and WHO.

NEW EFFORTS IN CONTROL OF DRUG ADDICTION

A new convention dealing with the control of addiction producing drugs has now been prepared by the Division of Narcotic Drugs of the United Nations. This Unified Convention is intended to replace the various existing diplomatic instruments—the 1925 and 1931 Conventions—amended in 1946—and the 1948 Protocol which came into force on 1 December 1949. The Commission on Narcotic Drugs of the Economic and Social Council requested WHO to provide it with definitions for some basic terms to be included in the new convention. The establishment of these definitions is one of the questions which the Expert Committee on Drugs Liable to Produce Addiction¹ discussed at its second session held in Geneva from 9 to 14 January 1950.²

Formerly the Expert Committee on Habit forming Drugs. Following the recommendation of the committee itself the Executive Board at its fifth session decided to change the denomination of the Expert Committee on Habit forming Drugs to Expert Committee on Drugs Liable to Produce Addiction—see also under Habit forming drugs page 77.

¹ The following took part in this session

Members

- J Bouquet Docteur en pharmacie ex Pharmacien des Hôpitaux de Tunis et ex Inspecteur des Pharmacies de Tunisie Tunisie
- Dr N B Eddy Medical Officer National Institutes of Health (US Public Health Service) Bethesda Md. USA (Chairman)
- J R Nicholls D.Sc. Deputy Government Chemist Government Laboratory London United Kingdom

Consultants

- Dr R E Carratalá Professor of Toxicology La Plata National University Buenos Aires Argentina
- Sir Ram N Chopra Professor of Pharmacology Director Drug Research Laboratory Srinagar Kashmir
- Dr G Joachimoglu Professor of Pharmacology Chairman Superior Health Council Ministry of Hygiene Athens Greece

Representatives of the United Nations

- L F Atzenwiler Assistant Secretary Permanent Central Opium Board and Drugs Supervisory Body Geneva
- B Celinski Division of Narcotic Drugs Lake Success N.Y.
- J Ditter Statistician Permanent Central Opium Board and Drugs Supervisory Body Geneva

Secretary

- Dr P O Wolff Chief Addiction producing Drugs Section WHO

Dr H P Chu Professor of Pharmacology National Medical College Shanghai China was unable to attend

Basic Definitions

The committee suggested the following three definitions

Drug addiction Drug addiction is a state of periodic or chronic intoxication detrimental to the individual and to society produced by the repeated consumption of a drug (natural or synthetic) Its characteristics include

- (1) an overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means
- (2) a tendency to increase the dose
- (3) a psychic (psychological) and sometimes a physical dependence on the effects of the drug

Addiction producing drugs An addiction producing drug is one which produces addiction as defined The committee added that according to information at present available any substance which will sustain an established addiction must be considered as also capable of producing an addiction

Habit forming drugs A habit forming drug is one which is or may be taken repeatedly without the production of all of the characteristics outlined in the definition of addiction and which is not generally considered to be detrimental to the individual and to society

The committee was of the opinion that the expression habit forming in the sense of addiction producing should be eliminated from all texts relating to drug addiction It was for this reason that it proposed that its own denomination should be changed

Other Requests from the Commission on Narcotic Drugs

Fundamental structure of an addiction producing drug The committee had been asked to give its opinion on the fundamental structure of addiction producing drugs This raises the question as to whether addiction is related to a special chemical structure The committee felt that this question could not yet be answered definitely and that in the present state of our knowledge it is impossible to say what part of the molecule of a drug is responsible for its addiction properties

Medical research on drug addiction The Commission on Narcotic Drugs wished to know the present position as regards medical research on drug addiction Exchanges of view within the committee revealed that investigations on this question were still at an initial stage In fact the only systematic medical researches of which the members of the committee were aware were those being carried out under the auspices of the US Public Health Service in the Research Division of the hospital

FIG 4 EXPERT COMMITTEE ON DRUGS LIABLE TO PRODUCE ADDICTION
SECOND SESSION



Left to right (seated round table) Dr R E Carratalá Dr G Joachimglu Sir Ram N Chopra
J R Nicholls Dr N B Eddy (Chairman) B Celinski (United Nations) Dr P O Wolff (WHO)
P Blanc (WHO) J Bouquet

at Lexington Kentucky, and those of certain groups of investigators in South America. Consequently the committee recommended that governments be urged to undertake or amplify medical research on this question.

Requests Submitted by Governments

The committee considered the request submitted by certain governments

Ipecopan A request was submitted by the Swiss Government that ipecopan, a mixture of emetine and cephaeline hydrobromides with the total alkaloids of opium (in the form of hydrochlorides) should be exempted from strict control under the 1925 Convention. The committee was unable to accept this proposal inasmuch as ipecopan contains a morphine salt in an amount equivalent to 37% of anhydrous morphine so that it would be possible to recover the morphine content by simple means.

Morpholyethylmorphine The French Government requested that a new product morpholyethylmorphine should be included in Group II of the first Article of the 1931 Convention i.e. in the codeine group which is subject to less severe provisions than the other ethers of morphine. This request was based on an examination of the pharmacological properties of morpholyethylmorphine which while being three times less toxic than codeine is as active as the latter and superior to it in certain other respects. The committee considered that there were not sufficient data available for the addiction producing properties of morpholyethyl

morphine to be estimated and that this compound was probably convertible to morphine. Furthermore because of its chemical constitution it should be included among the ethers of morphine other than methylmorphine (codeine) and ethylmorphine and be subject to the restrictions applying to this group.

Other Questions

Chronic barbiturate intoxication In many countries the abuse of barbiturates is creating more or less acute problems. In the USA production of these substances has considerably increased in the course of the last few years: in 1948 it exceeded by an appreciable amount the quantity necessary for medical use, reaching a level equivalent to about 24 therapeutic doses per head of population. An increasing number of morphine addicts are taking barbiturates as well. The committee took note of certain experiments which have been carried out in the USA with the object of determining the effects of chronic barbiturate intoxication. Prolonged administration—for 92 to 144 days—gave rise to symptoms of intoxication similar to those of alcoholism and induced marked tolerance. Sudden withdrawal produced a distinct abstinence syndrome characterized by the disappearance of the signs of intoxication by various physiological effects and by a psychosis resembling alcoholic delirium tremens. From these experiments it may be concluded that the barbiturates are liable to produce addiction.

2 (1 naphthylmethyl) imidazoline Addiction to 2 (1 naphthylmethyl) imidazoline, the hydrochloride of which is known as privityne or diazolin, is spreading in Argentina. The committee felt that this problem was similar to that of the abuse of amphetamine which was raised at the previous session and that for the time being there was no need to recommend international measures.

Other substances The committee took note of new information concerning various addiction-producing drugs such as certain compounds prepared during research on the synthesis of morphine. It repeated the recommendations formulated at its first session on the dangers of using keto bemidone and diacetylmorphine (heroin).³

The report on the second session of the Expert Committee on Drugs Liable to Produce Addiction will be published shortly as *World Health Organization Technical Report Series* no. 21.

IMPROVED HYGIENE FOR SEAFARERS

The hygiene of seafarers was the subject of two important meetings of experts which were held recently. From 10 to 20 October 1949, a working party of the Expert Committee on Venereal Infections¹ met in Washington to study the special problem of control of venereal diseases among seamen. The Joint ILO/WHO Committee on the Hygiene of Seafarers which held its first session in Geneva from 12 to 14 December discussed certain of the problems concerning the health of seafarers such as tuberculosis, venereal diseases, the organization of medical examinations, problems of hospitalization, etc.

It is of course, difficult to guarantee to seafarers medical service and social security such as other sections of the population enjoy. Nevertheless the International Labour Organization (ILO) and WHO are making efforts to improve the present situation. Conventions dealing with the medical examination of seafarers, food and catering for crews and crew accommodations on board ship have already been drawn up by ILO. There are still many problems to be solved however before the standards of hygiene of seafarers can be further raised.

Tuberculosis

The committee was of the opinion that while a complete medical examination of all seafarers was desirable at the time of first appoint

¹ The following were present at the meetings of this working party

Members

- Dr W. E. Coultts, Professor of Venereology, Chief, Department of Social Hygiene, Public Health Administration, Santiago, Chile
- Dr E. H. Hermans, Medical Director, Anti Venereal Disease Association, Rotterdam, Netherlands
- Dr G. L. M. McElligott, Director, Venereal Disease Department, St Mary's Hospital, Adviser in Venereal Diseases, Ministry of Health, London, United Kingdom (*Chairman*)

Consultants

- Dr N. Jungalwalla, Deputy Public Health Commissioner, Office of Director General of Health Services, New Delhi, India
- Dr T. Putkonen, Chief, State Hospital for Venereal Diseases, Kumpula (Helsinki), Finland

The following were present at this meeting

Members

ILO

- O. Bécu, Président de l'Union des Ouvriers de Transport, Antwerp, Belgium
- Captain O. I. Loevenstien, Vice President, Norwegian Shipowners' Association, Tonsberg, Norway
- R. Snedden, General Manager, The Shipping Federation, London, United Kingdom
- T. Yates, General Secretary, National Union of Seamen, London, United Kingdom

Adviser

- Dr E. L. Caldwell-Smith, Chief Medical Officer, The Shipping Federation, London, United Kingdom

WHO

- Dr T. B. H. Anderson, Medical Director, US Public Health Service, Medical Officer in Charge, US Marine Hospital, Staten Island, N.Y., USA
- Dr K. Evang, Director General of Public Health, Oslo, Norway (*Chairman*)
- Dr H. N. C. V. Kelaart, Divisional Medical Superintendent of Health, Department of Medical and Sanitary Services, Colombo, Ceylon
- Dr H. D. Reid, Chief Division of Quarantine, Immigration Medical and Sick Masters' Services, Ministry of National Health and Welfare, Ottawa, Canada

Secretaries

- Dr G. W. Miller, Assistant to the Director, Division of the Organization of Public Health Services, WHO
- J. L. Mowat, Chief, Maritime Section, ILO

ment and at regular intervals afterwards all countries did not have facilities for carrying out such examinations. It was therefore decided that this matter should be further examined with a view to evolving a plan later for a more general physical examination which could be universally applied. The committee also discussed the question of rehabilitation for seamen who had suffered from tuberculosis. It was generally agreed that many sufferers might not afterwards be fit for service at sea although they might be perfectly fit for other less strenuous occupations. The committee noted that vocational guidance and training were necessary to ensure that the ex-seamen should be fitted for other employment.

FIG 5 JOINT ILO/WHO COMMITTEE
ON THE HYGIENE OF SEAFARERS



Left to right: O. Bécu, R. Snedden,
Dr K. Évang (Chairman)

Venereal Diseases

The Brussels Agreement of 1924 respecting facilities to be accorded to merchant seamen for the treatment of venereal diseases should be amended owing to its limited scope. It makes no provision for the statistical and epidemiological evaluation of the problem of venereal diseases among seafarers. In addition the scope of these sanitary regulations should be enlarged to include river boatmen. The question of amending the Brussels Agreement is at present under review.³ However the draft text of the new regulations cannot be submitted before the Expert Committee on International Epidemiology and Quarantine has completed the text of the regulations concerning pestilential diseases.⁴ Until the new regulations are established WHO should concentrate on obtaining wider adherence to the Brussels Agreement seeing that it has been ratified by only 21 States.

A plan for revising the individual treatment booklet which was introduced under the Brussels Agreement was proposed by the Washington working party. This modified booklet should be sent by WHO to the various national health authorities together with a revised edition of the international list of treatment centres for venereal diseases.

Treatment

The use of certain repository penicillin preparations would seem to be the best means of rendering syphilitic chancres rapidly non infectious and of arresting gonorrhoea. Further research along these lines should be continued for this method would enable seamen to resume duty soon after intensive treatment. At the present time treatment with repository penicillin is carried out only in certain countries, and, before WHO makes any definite recommendations in this matter it would be useful to study the methods of treatment employed in various centres.

The working party experts emphasized that the use of penicillin on board vessels without any kind of medical control, could not be allowed. This practice leads to considerable loss of epidemiological information and to unfortunate gaps both in the diagnosis and in the post treatment observation of patients.

Port and river projects

The co operative effort in the control of venereal diseases undertaken by the health authorities of the States bordering on the Rhine⁵ was stressed by the Washington working party. This anti venereal disease activity has aroused such interest that the States on the shores of the Baltic have requested WHO's assistance in setting up in their area a commission based on the same principles.

Dr E. H. Hermans, Medical Director of the Anti Venereal Disease Association Rotterdam submitted a remarkable report at Washington concerning the guiding principles which must govern venereal disease control in sea and river ports. The report deals with the setting up and running of treatment centres, laboratory methods, treatment on board vessels, welfare work, anti venereal disease instruction and propaganda, the treatment booklet, international exchange of information, international co operation within the various river areas, state insurance, etc.

Further venereal disease control demonstrations might well be carried out in ports of the Eastern Mediterranean or of South East Asia.

Regulations

The Washington working party made special recommendations regarding the free treatment of venereal diseases and the duty incumbent upon doctors and medical institutions of notifying the various national health authorities for statistical purposes of infectious cases of venereal disease. Such notifications should also include a reference to the source of the infection.

In the opinion of the joint committee serological tests should be made compulsory for seamen before they are admitted to the profession.

Organization of Medical Services

The results of the preliminary medical examination and of the subsequent periodical examinations should be entered on each man's individual medical record possession of which should be compulsory in order to obtain employment. The joint committee however reserved for further consideration the confidential nature of the information concerning the state of health of sailors.

Hospital Facilities¹

The committee considered the various problems associated with the treatment of the seafarer in foreign ports. This discussion included such questions as rapid transportation from ship to hospital, suitable hospital food and the minimum requirements for medical chests on ships.

Many countries have an inadequate hospital system with varying standards of medical care. The committee proposed that information should be obtained on hospital facilities and conditions at various ports so that certain hospitals could be recommended as being entirely reliable for the treatment of seafarers.

PREVALENCE OF PLAGUE IN RECENT YEARS

The present decrease in the incidence of pandemic plague as revealed by statistics *does not justify the assumption that the disease has lost its power to spread*. In fact in certain countries it has been found that the relaxation of control measures during the war and the postwar period has resulted in extensive outbreaks.

It is true that a large number of areas formerly seriously infested for example Europe are today free from the disease. In other areas such as Egypt, Libya and Syria which have been particularly subject to pandemics for centuries only sporadic cases now occur. In regions where plague is transmitted by domestic rodents it is now possible to protect human communities from this scourge by the general application of measures for disinsection and deratting. Thus in South America it has been proved that by employing DDT and 1080 (sodium fluoracetate) it is possible to wipe out plague in the towns and villages¹. However while foci of endemic plague still persist the tenuous barrier represented by quarantine measures will not suffice to ensure absolute protection against the risk of infection. Wild rodent plague in particular which is a potential source of

infection for man continues to spread in South Africa and the Americas and remains a serious menace

The above observations were made by Dr P. M. Kari, Division of Epidemiology World Health Organization in an article entitled "Prevalence of plague in the world in recent years" ² From this detailed account which includes maps graphs and tables only a few facts relating to the epidemiology etiology and therapeutics of plague will be given

On the basis of the available data it may be stated that bubonic plague now occurs in an active state only in the following areas

Africa	Azores	Belgian Congo	Kenya	Madagascar	Senegal
	South Africa	South-West	Morocco	Tanganyika	
Asia	Burma	China	India	Indochina	Java
				Thailand	
South America	Argentina	Bolivia	Brazil	Peru	

Africa

It is believed that the history of plague in Egypt is very old since 1899 cases have been reported nearly every year. From 1907 onwards the province of Assiut became an important focus of infection. 90% of the cases reported in the country from 1938 to 1940 occurred in this province. During the 1939 and 1940 epidemics it was noticed that the buildings where the first cases of plague occurred had pigeon houses on their roofs. Such buildings are numerous since the inhabitants utilize the pigeon excreta for manure. The connexion between pigeon houses and plague may be explained by the fact that rats frequent such places in search of eggs and young birds and this increases the danger of the transmission of the disease.

Morocco was free from plague from 1936 to 1939. The disease reappeared in the south of the country in 1940 there were two epidemics in the Casablanca area in 1942 and in 1945. Since 1946 no cases of plague have been reported in Morocco. In Algeria the disease was introduced in 1899 but has never become widespread sporadic cases have been observed with slight epidemic outbreaks. The position in Tunisia has been similar.

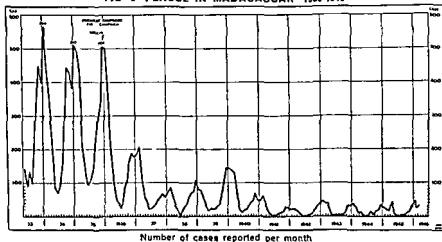
In Kenya which is an important East African plague centre there has been a decrease during recent years. The number of cases fell from 1101 in 1925 to 29 in 1948 with a few epidemic outbreaks in 1941 and 1942. Uganda too has always been considered as a focus of plague from 1939 to 1942 about 300 cases were reported there each year. However a sudden decrease took place in 1943 there being only 19 cases in that year. Plague control undertaken during this period comprised the preventive inoculation of persons especially exposed to the risk of infection the quarantine of

plague cases and above all deratting and disinsection. Wild rodent plague is unknown in Uganda. Since 1928 the annual number of cases in the Belgian Congo has not exceeded 73 and since then has decreased still further.

In southern Africa the permanent reservoir of plague is constituted by gerbils which transmit infection to other rodents particularly to multi-mammate mice which in turn transmit it to man. An epizootic is considered responsible for the rapid spread of an epidemic in Ngamiland in October 1944. Plague was introduced into the Union of South Africa at the beginning of the twentieth century and spread from the ports into the rural areas. The cases of plague usually occurred at times when mortality among domestic rodents was high following an epizootic among the gerbils. Rodent plague is now endemic throughout the greater part of the Union and is spreading into adjoining territories. The incidence of human plague which attained a maximum in 1935 and 1936 (586 cases in these two years) is now declining.

In Madagascar from 1899 to 1907 plague occurred in small sporadic outbreaks confined to the ports. Since 1921 the disease has become endemic along the high plateau. After having reached a maximum in 1933 with 3 887 cases infection has now decreased. The annual number of cases from 1943 to 1948 varied between 184 and 278. The disease is characterized in the island by a high death rate—96% in 1933 and 78.5% in 1947. Preventive inoculation with Girard's EV living plague vaccine is considered very effective. As shown by Legall the average morbidity rate per 10 000 inhabitants was 25.3 per year before the introduction of inoculation i.e. in the period from 1930 to 1934 with inoculation the annual average rate decreased to 4.6 for the years 1937 to 1941 (see fig. 6).

FIG. 6. PLAGUE IN MADAGASCAR 1933-1946



America

Plague first appeared in the United States in 1900, in the Chinese quarter of San Francisco. Since then and until quite recently a number of plague cases have occurred almost every year in California. In all, 503 cases were reported in the USA between 1900 and 1944. Since 1924 there have been no epidemics of human plague either of urban or of murine origin in the country. The sporadic cases reported were accidentally infected during epizootics among wild rodents. Research carried out in wild rodent plague, in territories representing 40% of the area of the continent has shown that the infection is widely distributed in 15 Western States. In 1945 it spread towards the east reaching Kansas and the adjoining area of Nebraska. This eastward advance is a menace since wild rodent plague may infect the rodents of the great plains, the Mississippi valley and the eastern United States. The disease has been found in 40 species of rodents (ground squirrels, rats, marmots, meadow mice, cotton tail rabbits, prairie dogs etc.). Infected fleas were taken from various rodents especially chipmunks, weasels and badgers.

Brazil was one of the first South American countries to be affected by plague. Since 1899 the disease has spread from the ports of Santos and Rio de Janeiro over a large section of the country where it is now endemic. A total of 757 cases was recorded during the years 1946, 1947 and 1948. The death rate which is relatively low continues to decrease further following the introduction of sulfonamide therapy; it fell from 33% in 1934 to 13% in 1948. Recently avirulent live vaccine has been used instead of the Haffkine type of vaccine.

Peru is the South American country which has suffered most from plague. There were nearly 20 000 cases between 1903 and 1929. However there has been a marked decrease since 1930 (2 870 cases between 1930 and 1944, 464 cases between 1945 and 1948).

Asia

The period of maximum spread of plague in India where it was imported from China in 1896 was during the years 1901 to 1907. Since then the incidence has declined. The number of deaths which reached six million for the period 1900 to 1909 fell to less than 500 000 for the period 1931 to 1939. The position became worse again in 1943 because of the war but in 1945 the mortality was slightly below that in 1942 which had been a minimum. In a report summarized in a preceding number of the *Chronicle*,³ Sharif described the endemic areas in India, their climatic conditions and the way in which plague is spread as well as pointing out the part played by the domestic rat in transmitting the disease.

In Java plague was first reported in 1910 and spread rapidly soon becoming an epidemic and advancing from east to west as the antiplague campaign destroyed the rats in the houses. Although it decreased between 1915 and 1918 the incidence began to increase in 1919 and epidemics have occurred every year since then the most serious being in 1933 and 1934. The incidence of the disease then declined again so that in 1940 only 312 cases were reported. This decrease would probably have been more pronounced if the war had not intervened. The incomplete information obtained during recent years does not make it possible to follow the general trend of the disease. However it is known that according to preliminary data 3 422 cases and 3 365 deaths occurred during the first 42 weeks of 1948 which indicates a very considerable plague infection.

In China notification of communicable diseases is not yet practised throughout the country. The reporting of cases of plague although more thoroughly carried out than that for other diseases is limited to some ten provinces. Incidence was very high during the period 1940 to 1947 reaching some 11 000 cases with 6 000 deaths in 1946 and then falling to about 3 000 cases in 1948. The construction of the new Burma road resulted in 1939 in the infection of Yunnan from the adjacent endemic focus in Burma.

The last part of Dr Kaul's article deals with plague in seaports and airports. In the opinion of the author all the large ports might soon have been free from plague if the international situation had remained normal. However because of the war plague reappeared in several Asiatic and African ports. Following the infection of the Suez Canal and North African ports the disease made its appearance in a few European ports in the Mediterranean since 1946 however no cases have been reported there.

MISSION TO HAITI

A WHO expert in tropical hygiene Dr A. Kundig was one of a group of United Nations experts sent to the Republic of Haiti at the request of its government to study the possibilities of economic and social development. This request was made in accordance with the resolution passed by the Economic and Social Council on 28 March 1947 to aid governments seeking technical advice: a team of experts would study specific problems on the spot and would recommend appropriate solutions for them.

Thus the mission to Haiti was entrusted first and foremost with the study of the problems of and the conditions affecting the economic development of Haiti primarily in the fields of agriculture industry and related activities having regard to the inter related economic and social

problems bearing in particular on the improvement of health and education' In the light of this study the mission was "to formulate proposals as to practicable measures and to appraise the needs implied by the measures proposed"

The group of experts was composed of representatives of the United Nations the International Monetary Fund FAO UNESCO and WHO

An undertaking of this nature constitutes a concrete example of international co operation in technical assistance and, in the words of Mr Trygve Lie Secretary General of the United Nations 'This Mission is a precursor of the simpler efforts which the international organizations concerned will be enabled to display in realization of the bold programme of technical assistance to underdeveloped countries'

In the introduction to the report submitted by the mission the experts set forth the essential facts of the present situation in Haiti and make recommendations of a general nature

The report itself consists of two parts In the first demographic, educational, and health problems affecting the economic position of Haiti are examined In the second transport production commercial, and financial problems are studied Recommendations are made in connexion with each particular problem

The population of Haiti which was estimated at 3 000 000 in 1948 is essentially agricultural There is practically no medical care for the rural inhabitants who represent about four fifths of the total population In fact of 292 physicians practising at the end of 1948 there were only 26 to look after the rural population of more than 2,500,000 There is no doubt that this situation constitutes the principal obstacle to the economic development of Haiti The urban population is better provided for, as regards both hospital facilities and medical personnel

The public health organization consists of a central department and provincial administrators The central department which has a director general at its head comprises 6 technical and administrative divisions dealing with the following problems epidemiology and prevention of epidemics malaria vital statistics quarantine, hospitals and clinics and dispensaries in the rural areas The Director General is also responsible for the 11 provincial districts where the local administrator also acts as physician in-charge of the district hospital In general the physicians in-charge of these hospitals are surgeons and have no training in rural health matters Moreover their work is hampered by lack of transport and because of inadequate remuneration they are unable to devote themselves entirely to their official duties A number of the 105 rural clinics

and dispensaries are closed because of financial and other difficulties furthermore the staff in these establishments is unqualified

Rural housing is unhealthy the people make constant use of surface water latrines and other sanitary installations are lacking Demographic and nosologic statistics are distinctly inadequate Infectious diseases are believed to cause 40 % of deaths of which 46 % are attributed to tuberculosis However these statistics are based only on incomplete data The prevalent diseases are reported to be yaws malaria tuberculosis and to a certain extent ankylostomiasis At least 85 % of the inhabitants of certain rural areas are reported to suffer from yaws

Malaria is probably very widespread but statistical data which are indispensable for suggesting appropriate measures are lacking The malaria vectors are reported to be *Anopheles albimanus* *A. grabhami* *A. vestitipennis* and *A. crucians* Drainage projects were carried out between 1942 and 1946 under the auspices of the Rockefeller Foundation but lack of maintenance has practically obliterated these efforts

One of the factors causing the spread of tuberculosis is overcrowding in hovels particularly in the slum quarters of Port au Prince The incidence of this disease in rural areas is unknown There is only one sanatorium in Haiti that at Port au Prince The hospital services for contagious cases even at the General Hospital of Port au Prince are inadequate and poorly organized

The mission formulated recommendations aiming above all at the establishment of a satisfactory public health organization in the rural areas This would require the health administrators of the rural districts to take technical training in public health and to devote the whole of their time to the rural health services It would be essential therefore to remunerate them adequately and to ensure for them the necessary means of transport

Before tackling the practical problems of malaria tuberculosis and ankylostomiasis control it is advisable to survey thoroughly the incidence of these diseases in rural areas It would also be very important to maintain the sanitary improvements already achieved and the installations which have already been constructed for malaria control

The mission also recommended either that the project for the construction of a new hospital at Bel Air (Port au Prince) be reconsidered or that a more economical solution such as enlarging the General Hospital be adopted

Yaws was made the object of special recommendations since the disablement caused by this disease seriously impairs capacity for work The mission suggested that the campaign against yaws be organized on a nation wide scale and that efforts be concentrated over a period of two to three years For this purpose it would be necessary to provide the rural clinics and dispensaries with the drugs necessary for the treatment of

yaws Penicillin in oil and beeswax is the drug of choice (2 injections administered at an interval of from 10 to 12 hours) The campaign could be successfully carried out by 12 physicians, each assisted by 5 medical aides and their practice would cover the rural clinics scattered throughout the country Each physician would direct 5 rural clinics

The cost of such a campaign would be very high but its influence on the economic development of the country would be considerable

Reports from WHO Fellows

Many of the letters and reports received from WHO Fellows have been of such interest that they deserve to be read by a wider public They demonstrate more vividly than a series of facts and figures both the character of the fellowship programme and the response of the Fellows themselves Selections from these reports have therefore been published from time to time but it must be emphasized that the opinions expressed are those of the Fellows

Tuberculosis Control

Dr M C Verghese Chief Tuberculosis Officer Trichur State of Travancore and Cochin (India) was awarded a WHO fellowship in order to study methods for the prevention and treatment of tuberculosis in Western Europe and North America Between February and October 1949 he travelled in Great Britain Denmark Sweden Norway the USA Canada France Switzerland and Italy visiting public health administrations schools research centres and hospitals and sanatoria

Dr Verghese noted that tuberculosis control was one of the major preoccupations of the health authorities of all the countries he visited indeed as a result of the second World War tuberculosis morbidity and mortality have increased almost everywhere

In all these countries voluntary organizations are co-operating with governments in tuberculosis control their efforts being concentrated on prevention aspects propaganda education and compilation and distribution of information etc In Italy the National Antituberculosis Federation is also responsible for the medical and scientific aspects of the campaign against the disease

The development of these voluntary bodies is an indication of the growing number of persons interested in the antituberculosis programmes Thus one of the finest children's sanatoria in Denmark built in 1939 is financed solely by the sale of special tuberculosis stamps every Christmas Denmark is moreover the country with the world's lowest tuberculosis mortality rate Progress in antituberculosis work dates from 1901 with the formation of the National Society for the Prevention of Tuberculosis since 1905 the State has supported campaigns organized by this voluntary body through an Act providing State subsidies for tuberculosis hospitals

It is of vital importance first for studying and then for checking the ravages of tuberculosis to be in possession of as accurate statistical data as possible. In all the countries visited by Dr Verghese he found that registration and statistical services exist which enable close attention to be given to tuberculosis morbidity and mortality figures as well as to the results of preventive measures and of treatment. In Denmark death certificates from physicians are sent before they are finally recorded to the Central Tuberculosis Dispensary for verification of the diagnosis. In Rome the Istituto Carlo Forlanini has made a series of comparative statistical surveys of the tuberculosis problem in Italy and in various other countries.

Dr Verghese emphasized that in all the countries he visited tuberculosis was a compulsorily notifiable disease and that steps were taken everywhere to isolate cases and give them hospital treatment. Several countries have undertaken mass radiography campaigns among whole sections of their populations. In certain parts of Great Britain notably Edinburgh apprentices undergo clinical and x ray examinations. Similar examinations are made of pregnant women attending antenatal clinics.

In Western Europe and in the USA the number of hospital beds available varies from one to three per death due to tuberculosis but in view of the growing number of cases which mass radiography daily reveals there is a definite shortage of beds. In certain States in the USA it is compulsory by law for the families of persons suffering from tuberculosis either to hospitalize the patients or to take in their own homes a series of specific precautions designed to prevent infection. In England the number of hospital beds for tuberculosis cases is adequate but there is a lack of trained nursing staff. Hence home medical treatment is practised.

Dr Verghese observed that medical authorities were also concerned with the control of non pulmonary tuberculosis a great many cases of which are due to infection with the bovine type of tubercle bacillus. The recent decline in the morbidity rate is certainly the result of increased use of tubercle free milk. In Denmark the law in this respect is very drastic any cow whose reaction to tuberculin is positive must be slaughtered.

The antituberculosis services of various countries are devoting more and more of their attention to the treatment of children the principal task of health visitors is to see that children and adolescents from infected homes are regularly examined and treated. In France about 40 000 beds are available for children a three fold organization having been set up acria for the children of tuberculous parents preventoria for those only slightly affected by the disease and sanatoria for serious cases.

Chest surgery is everywhere making rapid progress thanks to modern methods of anaesthesia and to blood transfusion. In the USA many of the surgical services possess a research centre and a physiotherapy clinic.

A large part of Dr Verghese's report is devoted to an examination of the various social security and health insurance systems in operation. Special insurance schemes for persons suffering from tuberculosis have been introduced in Italy and Switzerland. In France social security is the responsibility of the State. In the Scandinavian countries especially in Denmark practically all the population belong to state supported private insurance companies. In Great Britain the National Health Service Act guarantees free treatment to all patients. In addition to the official and private organizations dealing with the treatment of tuberculosis the existence of voluntary bodies makes possible the follow up of patients both during and after treatment.

BCG vaccination is used on a larger scale in France and in the Scandinavian countries than elsewhere. The writer of the report stresses that in Denmark the use of BCG particularly since 1940 has brought about a marked decline in the number of cases of tubercular meningitis observed. In Norway BCG vaccination is compulsory.

Dr Verghese concludes his report with a comparison between the achievements observed in the West and the antituberculosis campaign still in its infancy in his own country.

Notes and News

Practice of Medicine by Foreign Physicians

During the course of the last year WHO has received numerous inquiries from governments organizations and individuals regarding the recognition of foreign medical diplomas by various countries

In view of the considerable value which the establishment of international reciprocity in the public health field would offer the Director General of WHO has sent a circular letter to the various governments asking them to forward to him a copy of all legislation in force relating to the conditions under which foreign physicians are permitted to practise or teach medicine or to engage in any profession of a medical nature in a public or private capacity

Regional Organization for Europe

During its fourth session the WHO Executive Board had authorized the Director General to establish a regional organization for Europe once the consent of a majority of the Member States of the region had been obtained¹ The opinion of the 27 Member States concerned was requested on several occasions by the Director General 21 replies have been received of which only 15 are in favour of creating this new regional organization of WHO Although the majority of the replies received from the Governments consulted were favourable the Executive Board was impressed during its fifth session by the appreciable number of European states which either were not in favour of the proposed organization or had not made their views known Consequently the Board decided that it was not yet advisable to take any steps in this connexion and that the matter should be referred to the Third World Health Assembly

Daily Radio-broadcast of Epidemiological Bulletins

The text of the WHO epidemiological bulletins broadcast from the Genève-Prancins Station since January 1949 is completely renewed every Friday and repeated on the other days of the week

However in order not to delay the transmission of epidemiological news which may reach WHO at any time supplementary information is included at the beginning of the daily broadcast This latest news is followed by the words End of latest information so that health administrations need listen to the radio bulletins only as long as is absolutely necessary

When the text of the daily bulletin is the same as on the preceding day the transmission is preceded by the word repetition

Roumania Decides to Withdraw from WHO

In a telegram dated 20 February 1950 the Roumanian Minister of Health made known to the Director General of WHO his Government's decision to withdraw from the Organization

In this telegram the Roumanian Minister of Health criticizes the activity of WHO In particular he states that in the opinion of his Government The World Health Organization has not taken concrete measures to carry on successfully the fight for

¹ *Chr n H Id Hlth Org* 1949 3 243

Ch on World Hlth Org 1949 3 34 9., 43

preventing and combating disease on the international plane and has not contributed in a satisfactory manner to the dissemination of scientific progress in medicine and that it has been transformed into a bureaucratic institution which does not correspond to the tasks assigned it by its Constitution

The Member States of WHO have been informed of the decision of the Roumanian Government by a circular letter from the Director General

Roumania is the fifth State which has announced its intention to withdraw from the Organization the same decision was reached by the USSR the Byelorussian SSR and the Ukrainian SSR in February 1949³ and by Bulgaria in November 1949⁴

Ch o W M Hlt O g 1949 3 56

Ch W L Hlt Org 1950 4 32

Views on WHO

International Co-operation in Malaria Control

In a recent article in the *Archives de Médecine Sociale* Paris (1949 5 199) entitled An enemy malaria A weapon international health co-operation Hélène Rosebery deals with the problem of the control of malaria on an international scale She writes

Several programmes of malaria control were undertaken in 1949 on a co operative basis The national health authorities of various countries took part in them with the assistance of the World Health Organization (WHO) the United Nations International Children's Emergency Fund (UNICEF) and the Food and Agriculture Organization (FAO)

But there are still no international quarantine regulations against malaria Two great agencies of the United Nations the World Health Organization and the International Civil Aviation Organization have collaborated in taking the necessary precautions

In spite of modern methods of malaria control and the suppression of the disease in a small number of countries millions of deaths could still be avoided Further more the hundreds of millions of cases reduce the potential of workers In addition any kind of immigration into vast areas whose natural wealth could be developed if they were not subject to the

ravages of malaria is often rendered impossible

It is therefore a question not merely of saving human life of reducing morbidity and of raising the standard of living in the countries affected but also of increasing the world's supply of foodstuffs At a time when the world's population is increasing at such a tremendous rate reaching 25 000 000 births a year it is important to raise the level of production accordingly

This article also reviews the programmes which have been carried out and the results obtained in various countries and briefly outlines WHO's plans for malaria control in 1950

Priorities for International Medicine

A leading article published in *Discovery* London (1949 10 237) underlines the significance of co operation of individuals everywhere in campaigns against disease

The wise and beneficent plans of the second World Health Assembly will not succeed unless people all over the world do their bit in the worldwide fight against the major menaces to the health of the human species

But how are we all to do our bit? We are not experts and we do not know what the most serious world diseases are

nor how to combat them. Nobody realises this better than WHO and its educational plans are a prominent feature of the programme discussed in Rome. These plans are based on the view that it is better to show people how to get healthy and how to prevent the occurrence of disease than to put up in each country expensive safeguards against the diseases prevalent in each locality. These safeguards will be needed of course but if people are taught more about the causes of disease and how each disease spreads and if at the same time vigorous efforts are made to eradicate reservoirs of the major diseases of the world there will be less and less need for heavy capital expenditure on fever hospitals, quarantine stations and similar weapons now employed.

It would be hard to find aims more beneficial and more urgent than those embodied in the Assembly's programme. Its plans, if they can be brought to success, will have incalculable effects upon the future of a world which is in spite of political delays inevitably becoming a unity. They will increase the world's food supplies, substitute happy self-supporting people for the millions who are now badly nourished, ill and unhappily dependent. But the task of the WHO is not an easy one. It will not be done unless ordinary human beings all over the world are willing to help by learning how to keep fit, how to avoid infection with disease and how to help the other follow to work to the same end.

Support of WHO Programme

Dr J. R. Rees, President of the World Federation for Mental Health, emphasizes the importance of mental health in an article published in the *Bulletin of the World Federation for Mental Health* (1949 4 17).

The fact that there was agreement from the 70 nations present on the necessity and indeed the urgency of a mental health programme is significant.

The delegate from India said for example that in spite of the crying need for elementary public health measures in Asia the mental health programme would rank in importance there with plans for the control of malaria and epidemic diseases.

That it may not be possible to implement considerable parts of the suggested programme through lack of funds throws still further responsibility on the World Federation for Mental Health. Not only is it our responsibility to discuss, persuade and shape public opinion with regard to support of the WHO programme but further it is quite clear that if we can once meet our own essential administrative costs as a Federation and can then interest large donors in the carrying out of these vitally important survey and educational activities in the various countries of the world we as a Federation might be able to provide some of the personnel and costs involved in carrying out these projects. This is a point which looms very large in my mind. The established Foundations such as the Rockefeller are likely to co-operate with and support the health plan of WHO in many ways. Have we not thus a clear case for building up a foundation specifically concerned with human relations and mental health?

One was constantly reminded during the Assembly that just as in a war in the face of a common enemy the aggressions and tensions between groups in any country recede into the background so here in face of the common challenge of ill health and inefficiency throughout the world the personal, cultural and ideological tensions disappeared. The World Health Organization has certainly a greater opportunity for co-operative work than any other agency of U.N. It was fascinating to see how tensions which had begun to manifest themselves were in nearly every case diminished or resolved and one could not fail to realise not merely through the multitude of new contacts made personally but from the whole tone and spirit of the Assembly how big a contribution is possible along the lines of human relationships in the international field.

Mental Health Programme

With reference to the adoption of a mental health programme by the World Health Assembly the August number of the *Presse Medicale* Paris (1949 57 784) states

Problems of mental health play a part in almost all phases of medicine. The World Health Organization is therefore concerned with mental health when it is dealing with aberrations such as alcoholism and drug addiction. It is equally concerned with mental health when it draws up programmes for the control of tuberculosis, venereal diseases and malaria.

The subject has not in fact been investigated to any great extent. Thus far only one survey on psychoneuroses has been carried out in an industrial community in accordance with practical statistical methods. This survey revealed that neuro-pathic disorders caused greater loss of working hours than the common cold. One of the immediate tasks of the World Health Organization therefore is to collect complete information concerning the incidence and effects of mental ill health in a great number of fields. Another important task is to examine the present possibilities of work in mental health. The World Health Organization will also favour the application of improved methods for the treatment and prevention of nervous disorders and will seek to raise the standard of technical education in numerous professions where principles of mental health have an important part to play.*

Positive Achievements of WHO

An editorial in the issue for October 1949 of *Hospital* London (1949 45 594) comments on the first report of the Director General of WHO

From this first report it would appear that WHO has some positive achievements and has not allowed its deliberations to run out in the fine sands of argument

counter argument and constitution making which one associates so much with international co-operation at the present time. Certainly there is no lack of work to be done by WHO not only in countering immediate difficulties but in raising general health standards throughout the world and although a creditable start appears to have been made it will be necessary to await the results of a rather longer period of working before it can be said whether these are simply the first fruits of early enthusiasm or are an indication of something of lasting importance.

Banner with a Strange Device

An editorial in a recent issue of the *New England Journal of Medicine* Boston Mass (1949 241 795) comments on international co-operation in health matters.

Among the activities associated with the United Nations the World Health Organization stands out as one of the most promising. Its program is reasonable and reminiscent of the good old days before 1914 when the civilized nations united in all sorts of mutually beneficial activities such as uniform postal rates, copyright laws, weather reports, public health regulations, the gold standard and hydrographic surveys and global war had not been heard of since Waterloo except in the nightmares of H. G. Wells. If all nations could really agree on the importance of achieving world health most other problems would be solved for nothing is unhealthier than war and its sequelae.

Medical knowledge has kept pace with the technical advances that have marked a century of progress. This is what the chief of the American delegation to the second World Health Assembly held in Rome from June 13 to July 2 may have had in mind when he declared in his report. Unless we move forward to improve the health of mankind it is impossible for mankind to move forward. The statement suggests a pleasing slogan: *Gesundheit et excelsior!* What might the nations accomplish if united under a banner with such a device?†

Another Step to Better World Health

Dr K. Evang, Director General of Public Health Norway, President of the Second World Health Assembly, describes the new programme of WHO in an article which appeared in the *United Nations Bulletin* Late Success N.Y. (1949 7 106). The author outlines the main achievements of the Health Assembly held last summer in Rome and then warns that there is also a negative side of the balance.

Against a truly impressive list of positive results achieved by the Assembly we must place the negative side of the balance—namely our inability fully to convince our governments of the importance of the aims of WHO and of the vital role which the organization can play in improving health conditions in our individual countries as well as in the world generally. The effects of this failure on our part were evident during the discussion of the

funds which were to be placed at the disposal of WHO to enable it to carry out its tasks in the years to come. The lesson we learned at Rome is two-fold. First, WHO must do all in its power to fulfil the aim laid down in its Constitution of strengthening national health administrations so that they will carry more weight with their own governments. Furthermore—and this is even more important—each of us going back to his own country will have to use his imagination and his courage to present to his people the world's health problems in a simple but forceful way. It must be made clear to all nations that while the knowledge and the techniques are available to eliminate many or even most of the ills of man there are no short cuts to improved health. Indeed, to be established on a world wide basis health like peace calls for sacrifice on the part of every country and every individual in terms of money, work and prestige.

CORRIGENDUM

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In the list of delegates and observers present at the second session of the WHO Eastern Mediterranean Regional Committee Dr H. M. Elliott and Dr I. Anis were given as delegates of the Anglo-Egyptian Sudan. Dr Elliott and Dr Anis were in fact advisers both to the Egyptian and United Kingdom delegations and at the meetings acted as advisers alternately to both these delegations.



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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RECENT AND FORTHCOMING MEETINGS

1950

6-30 January	WHO Executive Board Standing Committee on Administration and Finance, Geneva
9-14 January	WHO Expert Committee on Drugs Liable to Produce Addiction second session Geneva
16 January-2 February	WHO Executive Board fifth session Geneva
6-10 February	WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel first session, Geneva
20-26 February	WHO Expert Committee on Nursing first session Geneva
27 February-3 March	WHO Expert Committee on Health Statistics Subcommittee on the Definition of Stillbirth and Abortion Paris
6-10 March	WHO Expert Committee on Health Statistics Subcommittee on Cancer Registration Paris
11-15 April	WHO Expert Committee on Antibiotics first session Geneva
11-15 April	WHO Expert Committee on Health Statistics Subcommittee on Hospital Statistics Geneva
17 April tentatively	WHO Expert Group Meeting on Prematurity Geneva
17-22 April	WHO Expert Committee on Rabies first session Geneva
18-22 April tentatively	WHO Expert Committee on Health Statistics second session Geneva
20-29 April	WHO Expert Committee on the Unification of Pharmacopoeias sixth session New York
8 May	Third World Health Assembly Geneva
June	WHO Executive Board, sixth session Geneva
August	WHO Expert Group Meeting on School Health Geneva
September	WHO Regional Committee for the Eastern Mediterranean third session Ankara
September	WHO Expert Committee on Tuberculosis fifth session
September	WHO Regional Committee for South East Asia third session Colombo

FIFTH SESSION OF THE EXECUTIVE BOARD

At its fifth session held in Geneva from 16 January to 2 February 1950 the Executive Board dealt with important administrative and financial problems which had previously been referred for study to some of its members acting as a Standing Committee on Administration and Finance. The conclusions and recommendations of this committee are summarized in another article appearing in this number of the *Chronicle*¹

The Executive Board also considered as prescribed by the Constitution the fundamental problem of a general programme of work covering a specific period and transmitted to the Third World Health Assembly its recommendations on this matter. Finally the Board examined the reports of expert committees considered various technical problems and took note of reports concerning the relations between WHO and the United Nations the specialized agencies and other international organizations

General Programme of Work for a Specific Period

The Executive Board at its fourth session had requested that the WHO programme of work which had originally been designed to cover a period of ten years like that of the other specialized agencies should be limited to a maximum of five years. This programme was to be a sort of half way house between the detailed annual programme and the long term programme comprising all the constitutional activities of WHO. Members of the Executive Board had been invited to communicate their views on the length of the period to be selected and on the composition of the programme. Their replies analysed and summarized by the Secretariat served as a basis for the discussion which developed during that session.

In spite of some differences of view a general consensus of opinion developed within the Executive Board which enabled definite conclusions to be reached constituting a decision regarding the planning of WHO work during the next few years.

Length of period

The programme will be set for a period of four years (1952-1955). This period represents a compromise between the views of some members of the Board who were in favour of three years and of others who advocated a six year period.

See p. 8 110

Annual revision of the programme would ensure the necessary flexibility in view of the rapidity of the evolution of science, the possible appearance of new methods of treatment and the urgency which a particular problem might suddenly attain

The Executive Board formulated certain general principles regarding programmes of work. The Director General will have the responsibility of adopting effective methods for implementing programmes and it will be the task of the regional committees to draw up a four year programme for each area along the lines laid down, the Executive Board proposed to review the programmes of these committees at its seventh session

General principles and selection of activities

The general view of members of the Executive Board was that the work of WHO must be based upon the principle of decentralization, carried out through the regional organizations. It is desirable that all countries including the non self governing and trusteeship territories should participate in the work of the Organization

Turning next to the problem of the selection of the activities to be included in WHO programmes of work the Executive Board proposed certain criteria

(1) Account must first of all be taken of the possibilities of the programmes being carried out by those governments seeking the assistance of WHO. The countries concerned must be able to participate in them both materially and morally and be in a position to continue the work when WHO assistance ceases. Only those techniques which have passed the experimental stage will be applied irrespective of the wishes of individual States on this point

(2) Preference should be given to such activities as are likely to benefit the largest possible number of Member States either directly or indirectly. It will increasingly be the responsibility of the regional committees in the future to report matters of general interest to headquarters and to draw the attention of governments to problems of purely local significance

(3) During the first four year period the activities selected should be such that the results may be rapidly appreciated and the programmes brought to a successful conclusion by the governments concerned. Under this heading for example come projects which will lead to a considerable decrease in the number of deaths from malaria or venereal diseases or to a marked reduction in infant mortality in a given area. It is to be hoped that with growing confidence in WHO this criterion will become less important for subsequent periods of activity

(4) The limited funds available to WHO should be devoted to those activities which seem likely to promise the most fruitful results. Activities

should be selected which may give maximum results for the minimum outlay

(5) Preference should be given to programmes for the carrying out of which qualified personnel are available

Main activities

The Executive Board classified the various general activities of WHO under certain headings

Traditional international services (1) The setting up of a health statistical service In co operation with the corresponding services of various countries WHO supplies all governments with statistical information on different subjects The survey of statistical problems recommended to governments by the Conference for the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death can be cited as an example of such co operation ²

(2) Collection and distribution of epidemiological information The epidemiological intelligence services in co operation with the regional offices are engaged in developing a simple and efficient system of distribution

(3) International health regulations and quarantine The object of these various measures is to prevent the spread of disease with the minimum of interference with trade and travel International health regulations which will take account of recent scientific and technical progress and which will replace the conventions at present in force are in the course of preparation

(4) Establishment of international standards for biological and pharmaceutical products

(5) Unification of pharmacopoeias

(6) Standardization of international medical nomenclatures

(7) Co ordination and encouragement of research in public health in co operation with national institutions

(8) Editorial publications and reference services particularly for the use of the national health authorities

To these traditional services should be added the adoption of nutritional standards standardization of certain laboratory tests etc

Services in co operation with other institutions In accordance with the obligations of its own Constitution and with those assigned to it by the Charter of the United Nations WHO is bound to give advice to United Nations bodies such as the Economic and Social Council and its various commissions (Commission on Human Rights Social Commission Com

mission on Narcotic Drugs³ among others), the Trusteeship Council,⁴ etc. Such co operation is in accord with the traditional policy of WHO, which aims to collaborate closely with the various United Nations services and with the other specialized agencies.

Services connected with professional education The world scarcity of medical and auxiliary personnel has made the problem of professional education one of the major preoccupations of the services concerned. It is essential for certain standards to be established to which all countries should attempt to conform concerning the training of doctors and other health workers. Not only do standards in medical education need to be raised in many countries, but there should be a re orientation of the studies of all those connected with health services to give increased emphasis to the modern aspects of public health and of preventive and social medicine. Tremendous advances have been made in medical science, but the number of persons benefiting from them is extremely small. This disproportion can be reduced only by the expansion and adaptation of national health programmes. Each country should possess at least a nucleus of persons acquainted with modern developments and the latest techniques and capable of training colleagues, in order to help the community to benefit from the achievements of science.

The members of the Executive Board stressed the present importance of this problem. They were of the opinion that WHO could make a contribution to the development of professional training by granting fellowships and facilitating access to professional instruction. It would be possible to judge the results of such WHO aid at the end of the first four year period.

Technical aid to governments The services under this heading must be regarded as falling essentially within the scope of the regional organizations. Hence the Executive Board did not feel that it was called upon to make any detailed recommendations for the programme of such work for 1952-1955. It indicated, however, the ends to which WHO's efforts should be directed: the establishment in each Member State of a central health service with an efficient full time staff; control of communicable diseases, particularly of malaria, tuberculosis, and venereal diseases; while giving consideration also to typhus, plague, cholera, smallpox, bilharziasis and leprosy; demonstration of control methods in specially selected areas; establishment in each country of a health statistical service, based on standardized methods enabling comparisons to be made on an international scale; provision of means of obtaining medical supplies; improvement of economic and social conditions which are closely allied to health (maternal and child health, nutrition, environmental sanitation, mental health).

³ See Chron. World Health Org. 1949 3 27, 1950 4 76.

⁴ See Chron. World Health Org. 1950 4 79.

also be brought to their attention. The particular conclusions referred to are those showing that the respective advantages and disadvantages of spraying with residual insecticides and of eradication (meaning essentially larval control) should be weighed before antimalarial campaigns are started. On the other hand larval control should be abandoned in rural areas where residual insecticides have given good results when systematically applied.

Regarding the long term objectives the Executive Board decided that the antimalarial campaign should have the highest priority in the technical assistance programmes for underdeveloped areas. WHO co-operation with the Food and Agriculture Organization (FAO) for assisting countries where malaria interferes with agricultural and economic development should be intensified. Regarding the supply of antimalarial products the Board requested that WHO should continue its efforts to facilitate—through the Economic and Social Council of the United Nations—the provision of antimalarial products to certain States and that it should study in conjunction with UNICEF and the Economic and Social Council, what assistance could be given to countries not producing such products so that they could start manufacturing insecticides in their own territory. The Board further recommended that an antimalarial conference in tropical Africa should be called during 1950 if adequate preparation has been made.

*Expert Committee on Tuberculosis*¹³

In its observations on the report of the fourth session of this committee the Executive Board referred particularly to the annex dealing with suggestions for the control of tuberculosis in countries with undeveloped or non-existent programmes¹⁴ suggesting that health administrations should give the widest publicity to this document. The Board stressed that BCG vaccination campaigns can be fully effective only if they are carried out as part of a general programme of tuberculosis control. Mass radiological examinations are justified only when facilities for treating cases discovered by this method exist. The Board noted with satisfaction the attention given by the committee to the provision of inexpensive treatment centres for tuberculous patients. This solution would enable the scarcity of beds to be remedied in places where it is impossible to erect more permanent structures.

Expert Committee on Venereal Infections

The Executive Board examined in addition to the report on the third session of this committee¹⁵ that of the Subcommittee on Serology and Laboratory Aspects¹⁶ and that of the WHO Syphilis Study Commission¹⁷

¹³ See Chron. W. H. H. H. Org. 1949 3 25

¹⁴ Chron. W. H. H. H. Org. 1949 3 256

Chron. W. H. H. H. Org. 1950 4 35

¹⁵ Chron. W. H. H. H. Org. 1950 4 41

Chron. W. H. H. H. Org. 1950 4 67

Its attention was directed to the epidemiological aspects of control particularly those related to seafarers. The Board called the attention of governments to the desirability of the adherence of a large number of countries to the Brussels Agreement and of active participation in the venereal disease control programmes in the larger ports. It gave its full support to the syphilis and yaws control projects in Haiti¹⁸ and to the bejel-control project in the Eastern Mediterranean Region.

The Board stressed that the present methods ensure rapid ambulatory treatment of cases detected by mass serological examinations. There will thus be no fear of the difficulties which were frequently encountered when dealing with tuberculosis owing to the impossibility of treating all the cases disclosed by the radiological examinations.

The Board requested the Director General to call the attention of governments to two matters: the value of the international serological conference planned for 1951 or 1952 and the necessity for each government to have a national laboratory for carrying on the work of standardizing serological tests.

*Joint OIHP/WHO Study Group on African Schistosomiasis*¹⁹

The recommendations which the joint study group formulated at its first session regarding the investigations to be carried out as to the distribution and incidence of bilharziasis (schistosomiasis) were approved by the Executive Board which instructed the Director General to take the necessary steps to implement them. The Board considered the problem of irrigation in connexion with the prevention of bilharziasis: the Board wished governments to be informed of the dangers entailed by the launching of new irrigation schemes in areas where the disease is present. Dr de Paula Souza presented a paper concerning *Bilharzia mansoni* in Brazil: the research that should be undertaken or expanded and the education of the public about this disease. Dr Villarama described the seriousness of the situation in the Philippines.

*Expert Committee on Environmental Sanitation*²⁰

The Executive Board made several reservations concerning certain conclusions and statements appearing in the report on the first session of this committee. In particular the Board considered that undue emphasis had been placed on the technical aspect of the problem—that is to say on sanitary engineering—at the expense of sanitation problems proper. Regarding the training of personnel members of the Board were of the

Ch 15 *Id Hlth O r* 1950 4 87

See Ch 16 *Id Hlth O r* 1950 4 6

See Ch 14 *Id Hlth O r* 1950 4 12

also be brought to their attention. The particular conclusions referred to are those showing that the respective advantages and disadvantages of spraying with residual insecticides and of eradication (meaning essentially larval control) should be weighed before antimalarial campaigns are started. On the other hand larval control should be abandoned in rural areas where residual insecticides have given good results when systematically applied.

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See *Chron. World Hlth Org.* 1949 3 25

Ch on World Hlth Org. 1949 3 256

¹⁴ *Chron. World Hlth Org.* 1950 4 35

Chron. World Hlth Org. 1950 4 41

Chron. World Hlth Org. 1950 4 67

whole matter of quarantine measures had been considered in connexion with the draft international sanitary regulations

*Joint ILO/WHO Committee on the Hygiene of Seafarers*¹

The publication of the report on the first session of this committee will be deferred the Executive Board having proposed that the joint committee reconsider at its second session certain of its recommendations

Other Problems

Rabies prophylaxis

Recent research has led to new developments in rabies prophylaxis. It has been shown that the injection of an already infected animal with hyperimmune serum is more effective than vaccination. This new treatment has been applied to human beings only in rare cases. It is therefore very important to carry out mass tests so as to obtain statistical results. The trials should take place in areas where a sufficient number of cases of rabies in human beings occurs in spite of vaccination. Egypt and Israel appear to satisfy the necessary conditions. The tests would consist in treating two groups of persons who have been gravely exposed to the risk of infection: one group would be treated with serum and vaccine and the other with vaccine alone.

In addition the vaccination of dogs, the value of which from the preventive standpoint is unquestionable, constitutes a difficult problem owing to the variable quality of rabies vaccine and the necessity of repeating the injections annually. A new process of vaccine production on eggs has enabled a suitable vaccine to be obtained which gives a higher and more lasting immunity than any of the vaccines previously used. Various regions have been considered for the field trials of this vaccine. The Israeli veterinary service has promised co-operation if such trials are carried out in their country. To avoid delay the Board authorized the undertaking of these trials on condition that the Expert Committee on Rabies, which is due to meet in April 1950, should consider them desirable.

Relations with UNICEF

The report on the third session of the Joint Committee on Health Policy UNICEF/WHO²⁵ stated that 74 projects had been approved or were already under way and that 60 others were in preparation. The projects referred to are for Europe, the Eastern Mediterranean Region, South East Asia, the West Pacific Region and the Americas. In each of these areas

¹ See Ch. IV, *W. H. O. g.* 1950, 4, 80.
Chron. World Hlth O. g. 1949, 3, 100.

opinion that the report ought to have stressed the necessity for the integration of such training in the courses of study designed for public health officers and other related medical personnel. The recommendations contained in the report are largely applicable to those countries which already possess well developed training facilities. more attention should have been given to rural sanitation which is often essential in underdeveloped areas.

*Expert Committee on Mental Health*¹

HAVING considered the report on the first session of this committee the Board stressed the importance that public health services should accord mental health. It emphasized the need for providing training facilities for mental health specialists and for encouraging research in clinical psychiatry. Instruction in mental hygiene and psychiatry should be incorporated in the courses of study of doctors particularly of pediatricians. These objectives will receive priority when the programme drawn up by the committee is carried out, however the resources of WHO will probably not allow its full accomplishment in the immediate future.

The Board further approved a recommendation of the committee—which was also supported by the Expert Committee on Drugs Liable to Produce Addiction—regarding meetings of experts to study problems of drug addiction and alcoholism.

Expert Committee on International Epidemiology and Quarantine

The two proposals concerning international sanitary regulations and regulations relating to the Mecca pilgrimage prepared by the committee at its second session were examined at the meetings of the Executive Board. It was decided to refer these documents to Member States and to the international agencies concerned for their study and comments, the latter to be included with the drafts to be submitted to the Fourth World Health Assembly. The Board noted the committee's report and expressed its satisfaction that a number of complaints arising from sanitary measures taken by governments and exceeding the provisions of the international conventions had been amicably settled.

*Yellow Fever Panel*²

The Board emphasized the interest of the report compiled by this group of experts particularly as regards the definition of endemic and epidemic areas. It deferred taking any decision about the vaccination certificates required of travellers coming from yellow fever areas until such time as the

¹ See Ch on World Hlth Org 1950 4 3.

² See Chron Wld Hlth Org 1950 4 46.

³ See Ch on World Hlth Org 1950 4 5.

MEMBERSHIP OF THE EXECUTIVE BOARD

The designating country is given in brackets after each member's name

Dr H S Gear Deputy Chief Health Officer for the Union of South Africa Cape Town (Union of South Africa) (*Vice Chairman*)

Dr C L González Director of Public Health Ministry of Health and Social Welfare Caracas (Venezuela)

Dr J A Höjer General Director Swedish Medical Board Stockholm (Sweden)

Dr H Hyde Medical Director US Public Health Service Washington D C (United States of America)

Dr M De Laet Secrétaire général du Ministère de la Santé publique et de la Famille Brussels (Netherlands)

Dr M D Mackenzie Principal Medical Officer Ministry of Health London (United Kingdom)

Sir Arcot L Mudaliar Vice Chancellor University of Madras (India) (*Chairman*)

Dr M Nazif Bey Assistant Under Secretary of State Ministry of Public Health Cairo (Egypt)

Dr J Parisot Professeur d'Hygiène et de Médecine sociale à la Faculté de Médecine de Nancy (France)

Dr G H de Paula Souza Director and Professor Faculty of Hygiene and Public Health, University of São Paulo (Brazil)

Dr A Stampar President of the Yugoslav Academy of Sciences and Arts Professor of Public Health and Social Medicine University of Zagreb (Yugoslavia)

Dr E Tok Under Secretary of State Ministry of Health and Social Assistance Ankara (Turkey)

Dr A Villarama Secretary (Minister) of Health Department of Health Manila (Philippines)

Dr J Zozaya Technical Adviser Ministry of Health and Welfare Mexico City (Mexico) (*Vice Chairman*)

Members designated by the Byelorussian Soviet Socialist Republic by China by Poland and by the Union of Soviet Socialist Republics were absent

advisers on maternal and child health tuberculosis venereal diseases and yaws malaria and nursing are already or will soon be available

The supply of material by UNICEF to governments has been an important factor in carrying out the latter's health programmes WHO in its turn has given technical advice in the initiation of programmes with the means available The co-operation thus achieved has proved most fruitful

Regarding the BCG vaccination campaign known as the Joint Enterprise, the Scandinavian Red Cross societies have announced their intention of terminating their activities in this enterprise on 31 December 1950 or as soon thereafter as the campaigns now under way have been concluded In the opinion of the representative of the Scandinavian Red Cross societies to UNICEF, vaccination campaigns in non European countries should be carried out under the antituberculosis programmes of various organizations preferably on a regional basis The question of technical responsibility for BCG vaccination programmes therefore requires reconsideration in particular of the part that WHO could take in assisting governments to launch new campaigns

Headquarters accommodation

The project for providing premises for the Geneva offices adopted by the Executive Board at its fourth session⁶ did not meet with the approval of the Secretary General of the United Nations in all respects, a new project has therefore been worked out and agreement reached among all the groups concerned This project will enable about 210 additional offices to be provided It provides for the raising of the Ariana wing of the Palais des Nations by three floors the construction of a new wing of five floors and various internal changes in the existing building The total cost of construction will amount to about 4 000 000 Swiss francs The Swiss Federal Council has offered WHO a subsidy of 3 000 000 Swiss francs a sum of 1 000 000 francs will be taken by WHO from the balance of unused appropriations for 1949

The Executive Board empowered some of its members constituted as a Building Committee to take a final decision both as regards the construction project and the conditions of occupancy this committee will be at the disposal of the Director General throughout the duration of the construction work in order to decide on behalf of the Executive Board any questions which would normally have to be referred to the latter The Executive Board expressed its appreciation to the Swiss Government for their generous contribution

The 1950 budget provided for a total expenditure of \$7 501 500. Member States were to contribute \$7 000 000 and the remainder was to be made up mainly by funds transferred by UNRRA. On the assumption that as in 1948 approximately 18% of the contributions due under the 1950 budget assessment were to remain unpaid a fresh substantial deficit would have to be faced. For this reason in taking account of the probable receipts for 1950 the Standing Committee thought it prudent to keep the level of expenditure for 1950 at \$6 000 000 pending a review of the financial position of the Organization by the Third Health Assembly. The Executive Board at its fifth session raised this figure to \$6 300 000.⁵

1951 Budget

In general the expenditure involved in carrying out the WHO programme for 1951 will remain at the same level as that for 1950. The committee has been impressed not only with the value balance and scope of the programme proposed by the Director General but also by the detailed and closely co-ordinated planning necessary to secure successful results. In examining the budget estimates for 1951 however the committee did not find them adequate to meet present world health needs which are so vast and complex that they cannot be met for many years. The policy of giving priority to certain problems however does provide a means of action. The committee considered that a budget of \$7 300 000 was financially sound and adequate for the continuation during 1951 of the programme for 1950 which was approved by the Second Health Assembly.⁶ The Third Health Assembly might invite the Executive Board to establish late in 1950 or early in 1951 in the light of the financial position of the Organization at that time and as estimated for 1951 the level of expenditure to be maintained during the first six months of 1951 consideration of the level of expenditure for the last six months of that year being left to the Fourth Health Assembly.

Technical Assistance for Economic Development

The expanded programme of technical assistance for the economic development of underdeveloped countries is still being worked out by the United Nations which has made a special allocation for WHO participation. The Executive Board at its fifth session approved this programme which will be submitted to the Third Health Assembly.

⁵ See p. 99.

⁶ *Chron. H. M. H. O. G.* 1949 3 165.

BUDGET AND STRUCTURE OF WHO

Meeting of the Standing Committee on Administration and Finance

The financial position of WHO which in the past has been a constant preoccupation of the Director General the Executive Board, and the Health Assemblies has again been reviewed at the meeting of the Standing Committee on Administration and Finance¹ held in Geneva from 6 to 25 January 1950 the report of which after review by the Executive Board at its fifth session, will be submitted to the Third World Health Assembly which meets in Geneva in May 1950

The Standing Committee was established at the fourth session of the Executive Board as the result of resolutions of the Second Health Assembly² to review the budget estimates for 1951, to examine the organizational structure, and to report its conclusions and recommendations to the Executive Board³

Present Financial Position of WHO

Although in the immediate future the financial position of WHO is not seriously endangered it might become more critical next year as a result of delays in the payment of contributions by Member States For the year 1948, 82.15% of the contributions had been collected at the end of 1949 out of a total assessment of \$3 172 726 leaving an uncollected balance of \$577 321 (or 17.85% of the total contributions) For the year 1949 for which the assessment amounted to \$5 046,293 73.29% only had been collected by the end of the year leaving an unpaid balance of \$1,347,624 (which is 26.71% of the assessment) The outstanding balances include the unpaid contributions of the four Member States who have announced their withdrawal from membership of the Organization⁴ The deficits have to be covered by advances from the working capital fund

The membership of the committee was as follows

Dr C. van den Berg
 Dr H. S. Gear (*Chairman*)
 Dr H. Hyde
 Dr M. D. Mackenzie
 Dr M. Nazif Day (*Vice Chairman and Rapporteur*)
 Dr A. Stampar
 Dr A. Villarama

Secretary: M. P. Segel, Acting Assistant Director General, WHO

The report of the Standing Committee on Administration and Finance will be published as *Off Rec World Hlth O g* 26

¹ *Off Rec World Hlth O g* 21 38 46

Off Rec World Hlth O g 22 11 *Chron World Hlth Org* 1949 3 237

Since the meeting of the Standing Committee two further Member States have announced their withdrawal from the membership of the Organization see *Chron World Hlth O g* 1950 4 92 126

NURSING NEEDS STUDIED

The worldwide need for more nurses is a major problem in planning and executing many health programmes. Recognizing this need, the Second World Health Assembly authorized the establishment of an expert committee on nursing to advise on means of recruiting and training nursing personnel¹. This committee met for the first time at Geneva from 20 to 26 February 1950².

In considering the question of how to provide an adequate quantity and quality of nursing services to meet the existing needs, the Expert Committee on Nursing concluded that the chief problems involved are

- (1) securing candidates for all types of training
- (2) promotion of the most effective use of available nursing personnel and
- (3) provision of the necessary educational facilities and programmes

Securing Candidates

Securing candidates for training is dependent upon many factors such as supply of woman power in general, relative attractiveness of competing occupations, quality of training schools and programmes, working conditions of nurses, and social attitudes toward the profession and its practitioners. The committee recommended that each government study the reasons for difficulty in securing candidates, taking into account psychological and social attitudes. It also recommended that WHO invite the co-operation of the International Labour Organization in a joint investiga-

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Th follw g w pres t t th m t g

M mb s

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Mil M L D d D t d j t d l Ec l d A t M l d M t g (Se) Fr ce

Miss M I Lamb form ly D ect D o f N rs g Dep rme t of Heal h W llingt N w

Ze l d (Chal m)

Miss G P k D ect S hool f N rs g f L B fl C cep b Ch l

Mis L P try Ch f N rse Office US P bl H lth S rvc W h gt DC USA (R ppo t)

Mis V S llin Inspecto of N rs g Ed t St l Bo d of H lth H l k Fnl d (Vl

Ch l man)

M ss F N Ud ll Ch f N rs g Off Col l l Off L d U t d K gd m

Co- p d m mb

Miss E W B k tt N rs g Ad I t m to al H lth D us Rock fl l Fo d t P rs,

F nc

Mis D C Bridges E cut Secret y l t m t l Co nc l of N rses Lo d U d Kingd m

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Sw tze l d

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M O B g ll y A t g Ch f N rs g Sect WHO

Mrs A W Ch g N rs g C l t t WHO R g l Off f th Am ic W hingt DC USA

M L M Cre lm N rs g C l t t N rs g Sect WHO

Organizational Structure of WHO

In considering the present structure and administration of the Organization, it is necessary to bear in mind the various factors which have contributed to its development. While the general structure of WHO is laid down in its Constitution various factors such as the work of the Interim Commission, the functions inherited from other organizations, the decisions of the First and Second Health Assemblies and of the Executive Board and their application by the Director General have given it its present characteristics. The most important of the fundamental principles applied by the Director General is that of decentralization. The committee stressed the importance of the development of self reliance and local responsibility so that the Organization's programme can be successfully carried out. It noted however, that there are certain difficulties in the present transitional phase of integrating the Pan American Sanitary Organization with WHO as the Regional Office for the Americas. The committee noted also that the absence of regional organizations in certain areas of the world has affected the existing organizational structure.

The chief function of the headquarters is the planning and supervision of the activities of the Organization and of the co ordination of the work of the regional offices, collection collation and dissemination of information, liaison with the United Nations, the specialized agencies and voluntary organizations, provision of technical advice on problems beyond the resources of the regional offices, provision of personnel and medical supplies and maintenance of central financial control. The committee agreed that its hitherto activities at the headquarters office should include co ordination and supervision of technical educational services, co ordination of epidemiological information, health statistics services and central advisory services to governments, standardization of biological and pharmaceutical products, laboratory tests etc, exchange of information on health matters, editorial publications and reference services, establishment of international regulation relating to the improvement of health and the solution of any technical questions which from time to time may become of special importance.

With regard to the present stage of development of the Secretariat the committee made recommendations for the regrouping and amalgamation of certain administrative units. A more thorough study of the organizational structure and administrative efficiency of the Organization has been deferred to a later date.

to include among their administrative officers highly competent nurses with authority to assist in planning health services to define the role of nursing in these services and to determine nursing personnel requirements. Also within the province of these administrative nurses would be leadership in determining policies in nursing education guidance in national studies of nursing resources and needs and provision of a means of exchanging information on nursing with other countries and with WHO.

Education

Basic training

Educational facilities and programmes must be provided for all types of nursing personnel and should include provision for in service as well as pre employment training.

In countries where basic educational programmes are new or in the process of being established or revised the following points should be emphasized.

(1) Schools of nursing should be directed by nurses competent both as nurses and as educators.

FIG 2 WHO CLASS FOR TUBERCULOSIS NURSES IN GREECE

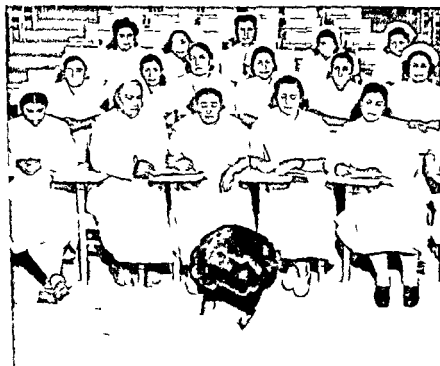


FIG 1 EXPERT COMMITTEE ON NURSING FIRST SESSION



Left to right (seated round table) Miss E W Brackett, Miss M L David, Interpreter, Miss T K. Adranvala, Miss Y Hentsch, Miss L M Creelman (WHO), Miss V Snellman (Vice Chairman), Miss M I Lamble (Chairman), Miss O Baggallay (WHO), Dr G W Miller (WHO), Miss F N Udell, Miss D C Bridges, Miss G Peaks

tion of the conditions of employment of nursing personnel this investigation to include consideration of salaries, hours, living conditions, personnel policies, qualifications required, amount and type of supervision, standards of services, and problems of recruitment. It was suggested that a pilot study be undertaken in an area with typical problems such as the Federal District of Mexico.

Effective Use of Nursing Personnel

Effective use of nursing personnel involves (1) efficient administration and supervision of nursing services in hospitals and public health programmes, (2) planning and operation of hospitals and equipment for maximum efficiency, (3) assignment of functions to appropriate personnel, (4) adjustment of standards of service to the amount of service available through simplification of procedures, and (5) distribution of nurses to services and to geographic areas in which they are most needed by means of incentives such as good living-conditions, salaries, educational opportunities, etc. To promote the most effective use of nursing personnel the committee recommended that WHO urge national health administrations

Advanced training

In every country there is a need for more advanced training for nurses who will occupy supervisory administrative or specialized positions. Such training should provide (1) advanced courses and supervised practice in the clinical field in which the nurse is to be employed—for example psychiatry mental health orthopaedics tuberculosis child care maternal health public health medical and surgical nursing etc. and (2) courses in administration and supervision of nursing services in hospitals or public health programmes in teaching and in administration of schools of nursing. The Expert Committee on Nursing recommended that the International Council of Nurses make a study of existing advanced education programmes throughout the world and prepare a list of these programmes with appropriate comments. This list would be extremely valuable particularly to those countries which do not have a sufficient number of nurses requiring advanced training to warrant setting up programmes and which might therefore wish to send nurses to educational centres in other countries. Co-operative planning among countries in providing these needed educational facilities would be advisable. Governments should make it possible through scholarships and other means for nurses to take advanced training in their own countries or elsewhere as may be required.

Specialities

Special training should be available for midwives and industrial nurses. Anaesthesiology the committee feels should be considered a medical speciality but until there is a sufficient number of physician anaesthetists specially trained nurses will continue to be used as a substitute in some countries. The committee was of the opinion that technicians for other specialities such as laboratory work physiotherapy and radiography should be trained independently of nurses.

Training of auxiliaries

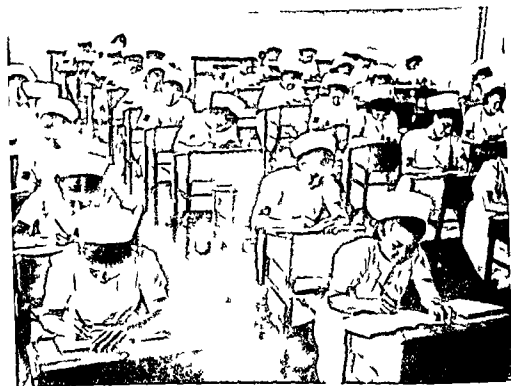
The responsibility for preparing auxiliary nursing personnel for their duties falls largely upon nurses whether the training is given previous to employment or on the job. The scope of the training for these workers should be based on the needs of each country and on the functions they are to perform. In all instances a planned scheme of instruction must be carried out. Practice in the care of patients should be given to the point of achievement of elementary nursing skills. The work of auxiliary nursing personnel if properly supervised by nurses can help fill some of the nursing needs but whenever possible these workers should be encouraged to complete their general education so that they can enter schools of nursing.

(2) While physicians and other professional and health workers should give instruction in nursing schools the teaching of clinical nursing and the supervision of students in their work should be done by qualified nurses

(3) Curricula should integrate principles of mental health, public health and prevention of disease with clinical studies

(4) Candidates for admission to nursing schools should be carefully selected

FIG 3 WHO NURSING CLASS AT THE RED CROSS SCHOOL OF NURSING
BANGKOK THAILAND



Where educational programmes are already well established they should be re evaluated in the light of whether they are adequately preparing nurses for modern health work. This may require a change from the idea that nurses do things *for* people to the idea that they do things *with* people, the nurse patient relationship having in itself real therapeutic value. Such an approach entails understanding and consideration of the role of the physical and social environment in the promotion of health and of the patient as a physiological and psychological entity rather than as a pathological case. It requires interest in achieving positive health for all the people and engaging their active participation in health programmes, rather than concentrating merely on caring for the sick.

The committee further recommended that WHO urge each Member Government to undertake (or continue) a study of

(1) the existing supply of each type of nursing personnel (including midwives and other specialized groups engaged in nursing duties) and of auxiliary nursing personnel

(2) the estimated number of each type of personnel needed in all categories of employment based on existing and prospective health programmes

(3) the factors which interfere with securing candidates for training of various types and

(4) the effectiveness with which nursing resources are used

The Expert Committee on Nursing also recommended that WHO refer its report and other pertinent materials to the Commission on the Status of Women UN Committee on Human Rights, for special consideration and that WHO request the Commission to lend its support on a national and international scale to the improvement of the status of nurses

PROFESSIONAL AND TECHNICAL EDUCATION OF MEDICAL AND AUXILIARY PERSONNEL

No lasting improvement in the health of the people can be achieved unless there is an adequate number of qualified physicians nurses sanitary engineers and related personnel to perform the necessary tasks The training of these groups is therefore of considerable importance to WHO The purpose of the first session of the Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel¹ held in Geneva from 6 to 10 February 1950 was to advise WHO on its course of action with regard to the education and training of medical and related personnel

The following took part in the session

At the

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D G W A d r s M y o P f sor d D ct School f Public H alth U rs ty f M es
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D C k Laksh m n D rect All d Inst t of Hyg a d P bl H lth C le tt I d
D J M Mack to h D an, Lo d School f Hyg a d Top l M d c Lo d U t d
K i g d m (R p p o i)
D H R ne P f s f Hyg l d Pre t M d c D ecto School f Hyg U rs ty
of Ch l S t g Ch l
Dr R Sa d Professe r d e M d e c soc i a l U rs té l b r e d Bru ll Bru sel Belg m (Ch m)

Co-opt d m mb

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Soc l Med i U rs ty of Zagreb Yug l

WHO Activities and Nursing

Fellowships

The committee urged that an increasing number of well selected nurses be granted fellowships for study in educational centres and welcomed a plan for sending doctors, public health administrators, sanitary engineers and nurses in teams for study. Regional offices should be encouraged to stimulate the use of fellowships for nurses.

FIG 4 WHO PUBLIC HEALTH NURSE IN INDIA



The WHO nurse (second from left) with local nurses in an Indian village

It was recommended that WHO sponsor international seminars on nursing problems, supply leaders for such seminars, and, where necessary, provide fellowships for nurses from many countries to attend them.

Provision of literature

The committee saw in WHO's programme for distributing medical literature and teaching equipment an opportunity to provide needed materials to nursing schools and it urged that governments be encouraged to request this type of assistance from

the Organization. It recommended that WHO publicize the availability of teaching materials and nursing literature so that nurses and nursing schools may make use of these educational tools.

Major Recommendations

In considering nursing from the standpoint of its role in promoting the health of people, the committee recommended that WHO undertake fundamental research to determine the real health needs of peoples in two or more different societies using anthropological and sociological methods. This study should also determine how nursing can best function to meet these needs through health teaching, participation in preventive programmes, care of the sick, and other means.

The committee further recommended that WHO urge each Member Government to undertake (or continue) a study of

(1) the existing supply of each type of nursing personnel (including midwives and other specialized groups engaged in nursing duties) and of auxiliary nursing personnel

(2) the estimated number of each type of personnel needed in all categories of employment based on existing and prospective health programmes

(3) the factors which interfere with securing candidates for training of various types and

(4) the effectiveness with which nursing resources are used

The Expert Committee on Nursing also recommended that WHO refer its report and other pertinent materials to the Commission on the Status of Women UN Committee on Human Rights for special consideration and that WHO request the Commission to lend its support on a national and international scale to the improvement of the status of nurses

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The following took part in this session

At the
 D M S Akai Direct School of Publ H lth A k T k y
 D G W A d r s My P of d D ect Sh ol f P bl H lth U rs ty f M es i
 M n n p l s Minn USA (V Ch i m)
 M M A d l l t ct of N s g Roy l Sw d h Bo d f H lth Stockh lm Sw d
 D C K L ksh m n Direct All d l t te f Hyg a d Publ H lth C l c t I d a
 Dr J M Mack t h Dean, Lo d School f Hyg e d Top l M d c Lo d U t d
 Kung d m (R p p o l)
 D H R me o Prof s of Hyg e d P e t e M d i D ect Scho l of Hyg e U rs y
 of Ch l S t go Ch l
 D R S d P f se r d Méd soc l al U rs té l br d Bru ll Bru sel Belg um (Ch m)
Co-opt d memb s
 D J P rnot Profes e d Hyg e t d Médéc oc l al F ulté d Méd d N cy F anc
 D G H de P l S za D t d P f F lty of Hyg e d P bl H lth U rs ty f
 Sâ P l B z l
 D A St mp Pre d t f the Y go l A ad my of Sc ces d Arts Professor f P bl H lth d
 Soc l M d U n rs ty f Zagreb Y gos l v

Physicians and other medical workers should be trained not only for the capable performance of their professional techniques but also for dealing with problems of health as they arise from or are related to, sociological and psychological problems of the individual, the group, and society as a whole. The role of physicians as health leaders of the community and country has been receiving an increasing amount of attention. The committee expressed the view that, at present, medical education in most countries does not prepare doctors for this role. Medical curricula should be revised to give more emphasis to the preventive and social aspects of medicine and health. A recommendation was adopted that studies of this subject be made by a special group of experts on medical education.

The committee considered the question of quantitative personnel needs and noted various approximate requirements of personnel in proportion to population (for example, one general practitioner to 1,500 population, one surgeon to 10,000 population, etc.). It was evident, however, that these requirements would vary depending on density of population, state of communications, prevailing economic conditions, social organization, prevalence of disease, and other local factors. A comparison of personnel supply and demand in different areas throughout the world is made still more difficult by the multiplicity of designations for various types of personnel. However, the committee did not think it advisable to propose at this time an artificial uniform nomenclature for classifying medical personnel, but it did recommend that information concerning the designations of the diverse types of health workers should be collected and made available to those interested.

Training resources in many parts of the world are not sufficient to prepare an adequate number of personnel, and it was emphasized that countries should be encouraged and assisted in developing their own educational facilities. This activity should receive special consideration in programmes for technical assistance in economic development. The training of teaching personnel should have high priority in WHO educational plans, and fellowships should be provided for advanced teaching personnel, lecturers, and others to take refresher courses.

Continued from p. 119

Representative of the United Nations

M. Mithaud, Head, Social Activities Service, United Nations European Office, Geneva

Observers

Dr H. A. de Boer, Industrial Hygiene Section, International Labour Organization, Geneva, Switzerland

Dr P. Glorieux, World Medical Association, Brussels, Belgium

Dr J. B. Grant, Director for Europe, International Health Division, Rockefeller Foundation, Paris, France

Dr J. Maystre, World Medical Association, Geneva, Switzerland

Professeur J. P. Agot, President, Swiss National Commission of UNESCO, Director, International Bureau

of Education, Geneva, Switzerland

Secretariat

Dr E. Grzegorzewski, Director, Division of Professional and Technical Education, WHO (Secretary)

Dr E. Kohn, Chief, Exchange of Scientific Information Section, WHO

Dr C. Y. Shu, Assistant to Education Institute Section, WHO

FIG 5 EXPERT COMMITTEE ON PROFESSIONAL AND TECHNICAL EDUCATION OF MEDICAL AND AUXILIARY PERSONNEL FIRST SESSION 1



Left to right (seated round table) Dr M S Akalin Miss M Andell Dr G W A de son (Vice Chairman) D R Sand (Chairman) Dr E Grzegorzewski (WHO) Dr J M Mackintosh (Rapporteur) D H Romero D G H de Paula Souza Dr J Parsot Dr A Stampar Dr J B Grant

There is a need for co ordination in the training of various types of health personnel so that each worker may realize his relationship with others who are performing different but related tasks. For example the sanitary engineer ought to be aware of general public health problems and the public health officer should have some conception of the work of the sanitary engineer. This becomes particularly important in areas where teamwork is essential.

It is unlikely that large numbers of highly trained personnel can be supplied soon in some countries. Although every possible effort should be made to accelerate this process attention must be given to temporary expedients such as training auxiliary personnel to work under the supervision of more adequately trained staff members.

There is a steady growth of specialization within public health services and the committee expressed the opinion that specialists (e.g. in tuberculosis venereal diseases maternal and child health etc.) should be required to take basic public health training in addition to or before concentrating on their specialities.

The committee discussed various methods of furthering the training activities of WHO paying particular attention to the fellowship programme. Specific recommendations were made with regard to the selection of Fellows.

and their subjects of study. Recommendations were also adopted concerning ways and means of assisting countries in the development of their educational institutions and of increasing collaboration among the institutions themselves in an effort to raise standards of training. Minimum basic requirements for a school of public health were outlined and accepted.

The exchange of scientific information was given considerable attention and it was recommended that a subcommittee be set up to examine some

of the problems involved. The committee endorsed WHO's programme for supplying medical literature and teaching equipment to countries and educational institutions.

The Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel examined those sections of WHO programmes for 1950 and 1951 with which it was concerned, endorsed them, made suggestions regarding their implementation, and added several recommendations. WHO's role it was decided should be primarily one of stimulating and co-ordinating efforts undertaken by governments and international agencies.

The committee's recommendations will be submitted to the Executive Board and to the World Health Assembly and if approved, may become the basis for the development of training programmes of WHO.

ENVIRONMENTAL SANITATION IN ITALY

By decree of the High Commissariat for Hygiene and Public Health dated 1 May 1949, a committee of experts was set up in Italy to examine the state of the public health services and to make specific recommendations for their reorganization. This committee presided over by the High Commissioner for Hygiene and Public Health was composed of Italian specialists

**FIG 6. EXPERT COMMITTEE ON
PROFESSIONAL AND TECHNICAL EDUCATION
OF MEDICAL AND AUXILIARY PERSONNEL
FIRST SESSION II**



Dr R. Sand (Chairman)

in public health and of experts named by the Rockefeller Foundation (International Health Division) and by WHO

The survey was prompted by a need to re evaluate the public health services in the light of consequences of war. During the second World War not only were many sanitary installations destroyed in Italy but it was also impossible to improve those already in existence or to construct new ones. Since the war other public health problems have likewise arisen and reform of the public health services has become essential.

In order to facilitate the work of the study group it was divided into six sections: public health organization, environmental sanitation, medical care, public health personnel, health insurance and social welfare legislation and juridical and administrative aspects of the health services.

Of special interest to WHO in the work published by the Office of the High Commissioner for Hygiene and Public Health¹ is the report on environmental sanitation submitted by Professor G. Buonomini, Director of the Institute of Hygiene at the Medical School of the University of Pisa and S. Pincus, who was at the time chief of the Environmental Sanitation Section of WHO. These two experts had an opportunity to study the environmental sanitation situation in Italy to present a detailed report thereon and to formulate conclusions on various aspects of the problem (drinking water, sewage, garbage, milk and other foods, housing and town planning, etc.).

It is common knowledge that in Roman times the water supply and the drainage works in Italy were remarkable. Italy has often been a pioneer in the public health field. Today however war damage plus a considerable increase in population with which essential sanitation works have not kept pace have brought about environmental sanitation conditions which call for an extensive public works programme.

At the present time not only is the supply of drinking water insufficient (three quarters of the communes in certain areas do not have sufficient quantities of drinking water) but the water is in many cases polluted. This situation coupled with inadequate sewage disposal and the absence of inspection of foodstuffs favours outbreaks of typhoid and paratyphoid, bacillary and amoebic dysentery, helminthiasis, etc.

Whereas in 1930 the morbidity for typhoid fever in the Scandinavian countries, Great Britain, Switzerland and other countries was below 5 per 100 000 inhabitants and the death rate less than 1 per 100 000 in Italy between 1930 and 1935 the death rate fluctuated between 12 and

¹ Alto Commiss. (to pe. l'ig. n. la S. nità P. blica (1949) C. mmi. l' f. th. Study f. the R. g. i. f. th. H. lth. C. e. S. l' e. 2 v. l. Rome. Th. i. also. Ital. rs on of this wo. k. I. V. l. H. (R. po. r. f. th. l' t.) th. re. n. be. f. d. i. d. d. u. to th. report on. ro. mental a. n. t. i. n. with which th. s. ru. le. i. o. r. ned. impo. r. t. i. w. on th. f. l. w. g. th. g. izat. of h. alth. ad. m. n. t. uon i. Italy (Professor S. C. m. rossa. d. Profess. E. L. St. bb. ns) m. d. i. c. l. treatment (Professo. L. Pira. nd. Pr. fessor A. Topp. ng) h. alth. service pers. n. l. (Professor V. Pu. t. and. D. V. W. Lipp. d) soci. l. security l. g. i. s. l. t. io. with. pec. al. refere. ce. to. m. d. l. t. m. nt. (V. Sa. oi. i. d. Dr. P. J. hl. Chrste. se.) leg. l. a. d. d. ministrat. p. ects of th. p. blic he. l. h. services. n. l. t. y. (A. Pap. ldo. d. E. L. Palm.)

15 per 100 000 inhabitants and before 1939, morbidity generally exceeded 80 per 100 000 inhabitants. This situation deteriorated considerably during the second World War and has improved but little since.

It can be stated without exaggeration that half of the population drinks polluted water. The surface water, soil and phreatic water are contaminated. Numerous cities and many villages lack proper facilities for sewage disposal. In 58% of the communes there are no sewage systems or, where they do exist, no treatment of residuary sludge.

Over population, lack of inspection of foodstuffs and unhygienic methods of their production and other factors also account for the frequency of water borne diseases or diseases attributable to deficiencies in environmental sanitation. The experts found many breaches in matters relative to the production and inspection of foodstuffs, in the dairy trade for example there is a need for considerable improvement in methods of collecting, transporting, pasteurizing and testing milk.

One of the gravest problems facing Italy is that of housing. Although the present situation is due largely to the war, this problem did exist and was far from solution even before the war. One report reveals that the average number of inhabitants per room rose from 1.31 in 1931 to 1.48 by the end of 1947. The situation is even more serious in the south of Italy (2.03 persons per room) and in the Islands (1.75 persons per room) than it is in the north of Italy (1.26 persons per room). In spite of the achievements of the Istituto di Case Popolari (Institute for Houses for Workers) and the Istituto Nazionale Case degli Impiegati dello Stato (National Institute for Houses for Civil Servants) a tremendous amount of work must still be done before even the minimum requirements are satisfied.

According to the experts it is important that the public health authorities give priority to remedying the critical situation caused by insufficient supplies of drinking water in a large part of Italy and to the housing shortage. Until some progress has been realized in these fields there can be little hope of reducing the incidence of diseases caused by inadequate environmental sanitation. It therefore seems urgent to attach qualified sanitary engineers to the different services concerned—national, regional or urban. The task of these sanitary engineers would be to study projects and plans for sanitary improvements relative to supplies of drinking water, the disposal and treatment of sewage and the problem of household garbage disposal. They would also be concerned with solving housing and town planning problems. Finally they would have to provide new regulations for the control of milk products and standards applicable to foodstuffs.

Notes and News

Visit of the King of Afghanistan to the Director General

King Mohammed Zahir of Afghanistan accompanied by several important personages including the Afghan Ambassador in Paris and Professor P. Boulenger, Dean of the Medical Faculty at Kabul, paid a visit on 22 February 1950 to Dr Brock Chisholm, Director General of WHO at the Palais des Nations, Geneva. The King of Afghanistan thanked Dr Chisholm for the assistance which the Organization gave to his country during 1949 and examined with him the lines along which certain health programmes might be applied in the future.

WHO health activities in Afghanistan are administered by the South East Asia Regional Office. It was largely through this office that assistance was sent to the country at the time of the typhus epidemic in July 1949. WHO has also undertaken investigations concerning the incidence of venereal infections and malaria in Afghanistan, where the latter disease constitutes a very important health problem. It has already been possible to undertake antimalaria demonstrations. The launching of antimalaria campaigns, as well as of other health programmes, will contribute to the improvement of the health of the people of Afghanistan.

Antimalaria Campaign in Persia

Professor M. Giaquinto Mira left Geneva on 13 March 1950 for Persia, where he will direct the work of the WHO antimalaria team. In the rural areas of Persia malaria is one of the biggest obstacles to the economic and social development of a large part of the population.

Professor Giaquinto Mira is well known for his work on malaria, onchocerciasis, typhus and brucellosis. From 1928 to 1936 he directed the Antimalaria and Tropical Diseases Service in Guatemala. During the last fourteen years he has taken part in the general organization of the public health services in Abyssinia and has collaborated in various antimalaria campaigns. In Addis Ababa he held the post of Director of the Imperial Ethiopian Medical Research Institute. Professor Giaquinto Mira will be assisted by C. Garrett Jones, entomologist of the London School of Hygiene and Tropical Medicine.

Antituberculosis Campaign in Poland

The mass BCG vaccination campaign undertaken in Poland by the Joint Enterprise¹ will soon be completed. The United Nations International Children's Emergency Fund (UNICEF) for its part will contribute directly towards the antituberculosis campaign in Poland by sending 140 radiography units. Thirty of these units have already been delivered. A WHO expert on radiography, C. Ashwin, tested each unit before dispatch. Mr Ashwin had already been responsible in 1949 for training specialists in the use of modern radiography apparatus in Poland.

Nutrition Experts in Ceylon and Egypt

Experts from the United Nations Food and Agriculture Organization (FAO) and from WHO have gone to Ceylon and Egypt in order to study certain problems connected with nutrition. At the request of the Government of Ceylon, Dr Dagmar Wilson of the Institute of Social Medicine, Oxford (England), will inquire into the incidence of

endemic goitre there. In Egypt Dr W. R. Aykroyd, Director of the Nutrition Division of FAO, and Dr F. W. Clements, Chief of the Nutrition Section of WHO, will study with the health authorities various problems connected with their special field. Dr Clements will also visit other areas in the Eastern Mediterranean in order to investigate the nutritional conditions of Arab refugees from Palestine.

Rehabilitation of the Disabled

Experts from the United Nations and from other specialized agencies—ILO, IRO, UNESCO, UNICEF and WHO—met in Geneva between 27 February and 3 March 1950 under the chairmanship of Dr H. Balme, a United Nations consultant, and formulated proposals for an international rehabilitation programme for the disabled to be carried out through the combined action of the above mentioned international organizations. These proposals will be forwarded to the Secretary General of the United Nations so that they can be submitted to the Social Commission of the Economic and Social Council at its sixth session, starting on 3 April 1950.

Supervisory Office for the Western Pacific

Pending the setting up of the Regional Organization for the Western Pacific, a Supervisory Office for the Western Pacific has been established in Geneva on a temporary basis. It will be directed by Dr I. Fang, formerly Acting Director, WHO Division of Field Operations.

Albania Decides to Withdraw from WHO

In a letter dated 25 February 1950 addressed to Dr Brock Chisholm, Director General of WHO, Mr Mihal Prifti, Deputy Minister for Foreign Affairs of the People's Republic of Albania, announced the decision of his country to withdraw from the World Health Organization.

In his letter the Deputy Minister for Foreign Affairs asserts that the activities of WHO are not satisfactory and do not conform to the principles defined in the Constitution. Furthermore, according to him, the attitude of the World Health Organization towards Albania has been of a discriminatory nature. The commitments which the World Health Organization has undertaken from time to time in reply to the continuous and moderate requests addressed to it by the Albanian Government for assistance in the various fields of medicine, such as antimalaria and anti venereal disease campaigns, etc. and for other help in the form of demonstration equipment, have not been respected by the Organization, which, on the contrary, has postponed them without any reason and constantly made them subject in a quite unjust way to conditions whose nature is such that the Albanian Government has found them unacceptable entirely without foundation and contrary to the statutes of the Organization.

The decision of Albania will be submitted to the Third World Health Assembly.

So far 68 countries have ratified the Constitution of WHO. However, although the Constitution contains no clause providing for withdrawal from the Organization, five other countries have already declared that they no longer consider themselves members of WHO. They are the USSR, the Byelorussian SSR, the Ukrainian SSR, Bulgaria and Roumania.*

* *Ch. on World Health O. g. 1950, 4, 92.*

PUBLICATIONS OF THE WORLD HEALTH ORGANIZATION *

WORLD HEALTH ORGANIZATION TECHNICAL REPORT SERIES

(Separate editions in English and in French)

	Price
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2 Expert Committee on Biological Standardization report on the third session	1/6 \$0 20
3 Expert Committee on Biological Standardization report of the Sub-committee on Fat Soluble Vitamins	9d \$0 10
4 Expert Committee on Insecticides report on the first session	<i>T b p blisk d</i>
5 Expert Committee on Health Statistics report on the first session	9d \$0 10
6 Active immunization against common communicable diseases of childhood	1/3 \$0 15
7 Expert Committee on Tuberculosis report on the fourth session	
8 Expert Committee on Malaria report on the third session	
9 Expert Committee on Mental Health report on the first session	
10 Expert Committee on Environmental Sanitation report on the first session	
11 Expert Committee on Plague report on the first session	
12 Expert Committee on the Unification of Pharmacopoeias report on the fifth session	
13 Expert Committee on Venereal Infections report on the third session	
14 Expert Committee on Venereal Infections report of the Subcommittee on Serology and Laboratory Aspects	<i>T b p blisk d</i>
15 Venereal Disease Control in the USA report of the WHO Syphilis Study Commission	
16 Joint FAO/WHO Expert Committee on Nutrition	
17 Joint OIHP/WHO Study Group on African Schistosomiasis report on the first session	
18 Joint OIHP/WHO Study Group on Cholera report on the third session	
19 Yellow Fever Panel report on the first session	
20 Expert Committee on International Epidemiology and Quarantine report on the second session	
21 Expert Committee on Drugs Liable to Produce Addiction report on the second session	9d \$0 10

* All prices are post free

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The *Digest* contains reproductions of or extracts from national laws and regulations dealing with public health and related subjects as well as a list of current legislation on such topics

Volume 1 (3 numbers)		
Price per single number	6/3	\$1.25
Volume 2 (4 numbers)		
Price per single number	6/3	\$1.25
Subscription for volume 2	25/	\$5.00

WEEKLY EPIDEMIOLOGICAL RECORD

(Bilingual English and French)

This publication intended for national health administrations and for health services at ports and frontiers contains notifications concerning diseases designated as pestilential in the International Sanitary Conventions as well as other information about the application of these Conventions

It is not sold separately but can be obtained in conjunction with the Epidemiological and Vital Statistics Report (see below)

EPIDEMIOLOGICAL AND VITAL STATISTICS REPORT

(Bilingual English and French)

The *Report* is published monthly and contains statistics on infectious diseases and birth and death rates and articles on epidemiological and demographic subjects

Subscription for 1950	25/	\$5.00
Price per single copy	2/6	\$0.50
Annual subscription including the <i>Weekly Epidemiological Record</i>	£2	\$8.00



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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RECENT AND FORTHCOMING MEETINGS

1950

11-15 April	WHO Expert Committee on Antibiotics first session Geneva
11-15 April	WHO Expert Committee on Health Statistics Subcommittee on Hospital Statistics Geneva
17-21 April	WHO Expert Group on Prematurity Geneva
17-22 April	WHO Expert Committee on Rabies first session Geneva
18-22 April	WHO Expert Committee on Health Statistics second session Geneva
20-29 April	WHO Expert Committee on the Unification of Pharmacopoeias sixth session New York
May	WHO European Health Conference to consider the establishment of a Regional Office for Europe tentatively Geneva
8 May	Third World Health Assembly Geneva
29-30 May	Joint Committee on Health Policy UNICEF/WHO Geneva
1 June	WHO Executive Board sixth session Geneva
August	WHO Expert Group on School Health Geneva
25 August 2 September	Joint ILO/WHO Committee on Occupational Hygiene first session Geneva
September	WHO Expert Committee on Tuberculosis fifth session
September	WHO Expert Committee on Venereal Infections Subcommittee on Serology and Laboratory Aspects second session tentatively Paris
September	WHO Regional Committee for the Eastern Mediterranean third session Ankara
September	WHO Regional Committee for South East Asia third session Colombo
September	WHO Regional Conference on Statistics tentatively Ankara
11-16 September	WHO Expert Committee on Mental Health second session Paris

1949 YEAR OF DEVELOPMENT FOR WHO

The annual report of the Director General¹ on the work of the World Health Organization is as stated in the introduction much more than a chronicle of progress by an organization. It reflects the growing realization of governments that many health problems require for their effective solution the united action of all the nations and the readiness of countries to give as well as to accept assistance in this great common task.

The programme for 1949 concentrated on aiding governments in controlling and preventing disease in co-ordinating and stimulating public health work and in strengthening public health administrations. Technical services were expanded: numerous joint enterprises were carried out in collaboration with other United Nations agencies and educational aid was given through provision of fellowships, medical literature and teaching materials.

Progress was made in administrative matters such as adapting activities to budget and making provisions for enlarging the Palais des Nations to accommodate the WHO Headquarters. Decentralization was advanced: the Regional Office for South East Asia (New Delhi) began to function on 1 January; the Regional Office for the Eastern Mediterranean (Alexandria) started operations on 1 July and arrangements were undertaken for integrating the Pan American Sanitary Bureau with WHO, the former serving as WHO Regional Office for the Americas during most of the year.

Twelve new Members were welcomed into the Organization making the total 68. Announcement of the decisions of four States to withdraw from active participation was received with regret.

ADVISORY SERVICES

Because of budgetary limitations the Organization's assistance to individual governments consisted largely of technical guidance rather than of direct assistance. This guidance was supplied by technical literature by provision of fellowships and teaching materials and most directly by services of consultants, demonstration teams and other types of specialized personnel. In assisting governments to initiate and carry out either general or specific health programmes WHO emphasized self help and sought to encourage the building up of national services which can continue to operate after outside help is withdrawn.

RECENT AND FORTHCOMING MEETINGS

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September	WHO Regional Committee for the Eastern Mediterranean third session Ankara
September	WHO Regional Committee for South East Asia third session Colombo
September	WHO Regional Conference on Statistics tentatively Ankara
11-16 September	WHO Expert Committee on Mental Health second session Paris

In the epidemiological survey 3 000 children were examined and during the entomological survey 10 000 specimens were collected DDT spraying has afforded protection to a population of 36 000 living in an area of 65 square miles Exceptional meteorological conditions have made it difficult to evaluate results but an extension of the campaign is being planned

Tuberculosis

Tuberculosis activities were greatly expanded during 1949 Many of the programmes were carried out with the assistance or under the auspices of UNICEF or the Joint Enterprise The work has been largely decentralized through transfer of direction to the regional offices Tuberculosis advisers were appointed to the Region of the Americas and to the Eastern Mediterranean Region and plans were made for the appointment of a similar adviser to South East Asia

Programme guidance and technical information were supplied by the Expert Committee on Tuberculosis which met for its fourth session in July⁵ Plans were made for a subcommittee on streptomycin to be convened in 1950 and WHO assisted UNICEF in preparing for a conference of streptomycin experts held in Paris

Preliminary surveys were conducted during 1949 in Aden Belgium Cyprus the Hashemite Kingdom of the Jordan Iran Iraq Italy the Netherlands Saudi Arabia Syria and 19 countries of the Americas Requests were considered for joint UNICEF/WHO projects on tuberculosis with special reference to BCG vaccination for Malaya Mexico the Philippines Singapore and Thailand

BCG vaccination campaigns sponsored by the Joint Enterprise were or will be conducted in the following countries Austria Ceylon Czechoslovakia Egypt Finland Greece India Israel Lebanon Pakistan Poland and Yugoslavia The WHO Tuberculosis Research Office in Copenhagen is co operating with UNICEF in evaluating the results of these campaigns and members of its staff and WHO statisticians visited many of the countries concerned to survey the situation preparatory to beginning the project or to assist in compiling information A central statistical services office is to be set up in Vienna

Also in co operation with UNICEF WHO assisted in the work of a BCG pilot station in France and is making arrangements for a BCG laboratory in Mexico

Advice on streptomycin therapy was given in Czechoslovakia Greece Hungary Poland and Yugoslavia in connexion with supplies of the drug from UNICEF

Communicable Diseases

The chief efforts of the disease control programmes of WHO for 1949 were concentrated on malaria, tuberculosis and venereal infections chiefly because these are serious and widespread problems, which, with present day knowledge and control techniques may be dealt with effectively on a large scale. Many of the projects undertaken in 1949 were of a preliminary or experimental nature and the full effects will not be realized for another year or two.

Malaria

Guidance was given to the WHO malarial programme by the Expert Committee on Malaria which met in August³ and by the Expert Committee on Insecticides which met in May⁴.

The WHO malaria consultant assigned to the Far Eastern Mission of the United Nations International Children's Emergency Fund (UNICEF) visited British Borneo, India, Indonesia, the Malayan Peninsula, the Philippines and Thailand to advise on malaria problems. Consultant services were also made available to Bulgaria, Greece, Hungary and Venezuela. Expert advice was given in arranging insect control courses in Italy, in teaching in Venezuela, in lectures given in Mexico and the USA and in arranging for a malaria conference to be held in Equatorial Africa in 1950.

Surveys followed by pilot demonstrations were carried out in Afghanistan and Iran. A demonstration was carried out in Thailand with supplies furnished by UNICEF and a most successful campaign was conducted in the refugee camps in the Gaza area of Palestine.

In Europe WHO and UNICEF assisted in malarial projects in Greece, Hungary, Roumania, and Yugoslavia. A sanitary engineer was sent to Turkey to advise on techniques and programmes for malaria control and insecticides were supplied for demonstration purposes.

Four demonstration teams have been operating in India under the technical supervision of WHO and with supplies furnished by UNICEF. Although it is still too early to evaluate the results of their work, the reports from these teams are encouraging.

One of the best examples of the work of an international demonstration team has been that of the group in Pakistan. This team consists of a WHO malariologist, public health engineer, entomologist and public health nurse together with personnel supplied by the Pakistan Government. Supplies and equipment have been provided by WHO and UNICEF.

³ *World Hlth Org tech. Rep. Ser.* 1950. 8. see also *Cir.* 11. *W. Hlth Org.* 1949. 3. 756.

⁴ To be published as *W. Hlth Org. tech. Rep. Ser.* 1950. 4. see also *Ch.* *W. Hlth Org.* 1949.

cillin being requested from UNICEF for the treatment of pregnant women and children. In India a team established a demonstration project in the Simla (Himachal Pradesh) area. As part of this project large scale training programmes are under way mass blood testing surveys are being conducted and conferences and demonstrations have been organized. Plans for six satellite teams for India have also been made. A survey in Afghanistan revealed a high incidence of venereal diseases and a national anti venereal disease programme including the reorganization of the laboratory services and the assistance of a WHO/UNICEF demonstration project has been planned for 1950.

In the anti venereal disease programmes in Europe attention has been focused on penicillin treatment schemes and demonstrations were conducted and/or lectures given in Austria Bulgaria Denmark Finland France Hungary the Netherlands Norway Sweden and Yugoslavia. Control projects were in operation with UNICEF supplies and WHO technical assistance in Czechoslovakia Greece Hungary Italy Poland Roumania and Yugoslavia.

At the request of Belgium France the Netherlands and Switzerland a preparatory meeting for the establishment of a Rhine River Anti Venereal Disease Commission was held at which a programme for co ordination of venereal disease control among Rhine River boatmen was drawn up in co operation with the International Labour Organization (ILO).⁷ Venereal disease control among seamen was also discussed by the Joint ILO/WHO Committee on the Hygiene of Seafarers which met in December.⁸

Advisory services in venereal disease control were provided to Ceylon Guatemala Mexico the Philippines and the USA. Burma was assisted in a campaign which included the establishment of a modern clinic with laboratory facilities. Technical information was supplied to Czechoslovakia Poland and Yugoslavia concerning the modernization of the penicillin production plants supplied to them by UNRRA and WHO called a conference on penicillin production which was held in Geneva in February.⁹

Meetings of the Expert Committee on Venereal Infections¹⁰ and its Subcommittee on Serology and Laboratory Aspects¹¹ provided technical orientation and assistance. Of particular interest at the former was the report of the WHO Syphilis Study Commission to the USA.¹²

Ch W Id Hh O g 1949 3 117

Ch W o Id Hh O g 1950 4 80

Ch on World Hh O g 1949 3 53

4 35 To be p bl h d W Id Hh O g t kn R p S 1950 13 see al Ch W Id Hh O g 1950

4 41 To be p bl h d W Id Hh O g t ch R p S 1950 14 see Iso Ch on World Hh O g 1950

World Hh O g t h R p S 1950 15 see 1 Ch World Hh O g 1950 4 67

X-ray consultant services were given to Egypt, Poland, Portugal and Yugoslavia in connexion with equipment supplied by UNICEF. In China a WHO tuberculosis nurse supervised the mass x-ray examination of 5 000 children, in addition to assisting in teaching tuberculosis nursing and working on a BCG vaccination campaign.

Tuberculin testing has been studied: a WHO research team was sent to India to obtain information⁶ and a co-operative programme to determine the specificity of the tuberculin test and the significance of non-specific reactions was undertaken in Iceland under the auspices of WHO and UNICEF.

A major concern in tuberculosis programmes is the training of workers—nurses and technicians as well as doctors. Demonstration projects are a means of providing training facilities and such a project has been undertaken in El Salvador. A WHO consultant visited Ceylon and Burma to survey suitable areas for training centres to be set up jointly by UNICEF and WHO. India, where three centres are to be established, was also surveyed for this purpose. In all of these training centres, BCG work will be integrated with teaching activities. In Greece a WHO public health nurse initiated general training courses in nursing and assisted in organizing a tuberculosis nurse training school, the first of its kind in that country.

Veneral diseases

In its anti-veneral disease activities WHO is turning towards the control of treponematoses in general rather than of syphilis alone, and yaws and bejel control programmes have been undertaken in regions where these diseases are prevalent. Particular attention is also being given to prenatal, infantile and early syphilis, all of which respond to penicillin treatment.

A programme for bejel control was planned for the Eastern Mediterranean Region and surveys were conducted in Egypt, the Hashemite Kingdom of the Jordan, Iraq, Lebanon, Pakistan, Syria and Turkey. The Iraq Government has offered to build a laboratory and to provide accommodation for a term if WHO will supply the necessary equipment, and in Syria it was suggested that the anti-bejel project might be combined with the FAO/WHO malaria programme.

Campaigns against yaws have been organized with UNICEF aid in the Dominican Republic, Haiti, Indonesia, the Philippines and Thailand. UNICEF having already granted \$700 000 for supplies in Indonesia.

Following a preliminary survey in Egypt by a WHO consultant, a team consisting of a health educator, serologist, medical officer and nurse was organized. Literature, equipment and supplies were procured, peni-

⁶ See Ch. on *Health Statistics* 1949, 3, 3.

Nurses attached to malaria demonstration teams have initiated maternal and child health programmes in India and Pakistan. Other nurses have been recruited to organize projects in Brunei and Sarawak.

In the Palestine refugee camps a diphtheria immunization project was undertaken in which 14 000 out of 70 000 children between the ages of six months and 14 years were given double injections of alum precipitated toxoid. A maternal and child health programme was carried out under the supervision of a Quaker nurse midwife assisted by four Palestinian assistants and about a hundred local midwives.

A demonstration team consisting of a paediatrician and a paediatric nurse was assigned to India and another team was sent to South Korea to advise on organization of services to start a training institute of child health in Seoul (with UNICEF aid) and to carry out model teaching in social and clinical paediatrics and obstetrics.

Technical assistance was given to Finland in connexion with WHO/UNICEF projects. In France special studies on poliomyelitis and on the care of premature babies were made and equipment to improve these services was obtained through UNICEF. WHO assisted UNICEF in the creation of a Children's Centre in Paris.

Mental health

Mental health is a comparatively new field for international co-operation. The Expert Committee on Mental Health which met in August¹⁸ advised the Organization on the implementation of its mental health programme.

The Republic of the Philippines was the first government to request aid in mental health and a consultant was sent in November to assist in organizing a programme and specifically to do preparatory work in connexion with a proposed WHO/UNICEF project on child guidance clinics.

An expert was sent to Austria to assist in the development of a mental health programme. Israel requested the services of a consultant and Venezuela asked for an expert on psychiatric nursing and social work.

WHO co-operated in relevant activities of other United Nations groups specifically in the UN Social Commission study on crime and treatment of offenders, the UN Study of Homeless Children and various UNESCO projects.

Nutrition

The activities of WHO concerning nutrition consisted largely of operations in co-operation with the Food and Agriculture Organization (FAO). The Joint FAO/WHO Expert Committee on Nutrition at its meeting in

Other communicable diseases

Other communicable diseases which received particular attention during 1949 include bilharziasis, cholera, plague, typhus, and yellow fever. Bilharziasis, cholera, and plague were studied respectively by the Joint OIHP/WHO Study Group on African Schistosomiasis,¹³ the Joint OIHP/WHO Study Group on Cholera,¹⁴ which visited endemic areas in India and Pakistan, and the Expert Committee on Plague,¹⁵ which is the successor to a former joint OIHP/WHO study group. Rickettsial infections in Africa were considered by the Joint OIHP/WHO Study Group on African Rickettsioses which met in Paris in September. Members of the Yellow Fever Panel met in December¹⁶ to examine the present position regarding yellow fever endemicity and to advise the Expert Committee on International Epidemiology and Quarantine in its drafting of new sanitary regulations.

Emergency aid was given to Afghanistan in an outbreak of louse borne typhus and to India in a poliomyelitis epidemic through the supply of iron lungs and technical information. A consultant nurse and physiotherapist will be sent to assist in the organization of poliomyelitis research and of rehabilitation services.

Physical, Mental, and Social Well Being

Maternal and child health

The Expert Committee on Maternal and Child Health met in January¹⁷ to advise the Organization on its programme relating to these services. Full time regional advisers were attached to the Special Office for Europe and to the South East Asia Regional Office, and plans were made to attach others to the Eastern Mediterranean Region and to the Region of the Americas.

Consultant services were given to Afghanistan, British Borneo, Ceylon, Egypt, Lebanon, Malaya, Pakistan, the Philippines, and Thailand. In several of these countries, preliminary surveys were made in preparation for joint UNICEF/WHO projects. An expert on child health was sent to Ecuador to help organize the relief programme following an earthquake and a consultant was provided to advise on a large scale antipertussis immunization campaign in the United Kingdom.

¹³ To be published as *World Health Organization Technical Report Series* 1950 17. See also *World Health Organization* 1950 4 6.

¹⁴ To be published as *World Health Organization Technical Report Series* 1950 18. See also *World Health Organization* 1950 4 10.

¹⁵ To be published as *World Health Organization Technical Report Series* 1950 11. See also *World Health Organization* 1949 3 269.

¹⁶ To be published as *World Health Organization Technical Report Series* 1950 19. See also *World Health Organization* 1950 4 5.

¹⁷ *Off Rec World Health Organization* 19 35. See also *World Health Organization* 1949 3 43.

sent to Egypt and to the Republic of the Philippines in the former country a special study of the areas in which bilharziasis is prevalent was started in order to ensure proper safeguards against the disease in places where irrigation projects are being undertaken

Insect control programmes were planned in co operation with UNICEF in British Honduras Costa Rica El Salvador Guatemala Honduras and Nicaragua

Assistance was given to Iran in recruiting trained sanitary engineers for a proposed national sanitation programme and in Ethiopia aid in training personnel was instrumental in achieving notable improvement in sanitation conditions

Health education of the public

Activities with regard to health education of the public were of a more or less preliminary nature WHO experts visited France India and the United Kingdom Health educators were assigned to several demonstration projects such as those in Egypt and Haiti

Nursing

The Nursing Section of the Secretariat was organized during the year and an Expert Committee on Nursing was established²² Nursing instructors assigned to institutions in Ethiopia Greece and India assisted in training programmes WHO public health nurses were attached to demonstration projects where they engaged in training as well as in clinical activities

Professional and Technical Education

One of the most serious problems facing an organization concerned with promoting world health is the lack of adequately trained personnel WHO has attempted to deal with this problem by providing guidance and stimulus to educational programmes by aiding in the collection and dissemination of information and by direct assistance in the form of personnel services (consultants teachers etc) fellowships and provision of medical literature supplies and teaching equipment

WHO activities relative to professional and technical education in 1949 included assistance in directing hospital services and training surgeons and auxiliary personnel in China training medical auxiliaries in Ethiopia establishing a state medical library and medical documentation centre in Prague and anaesthesiology training-centres in Prague and Copenhagen and planning public health courses in Lebanon and the Netherlands an advanced biochemistry training centre for Eastern Europe at

²² *Chro Wld Hlth Org* 1950 4 113

October¹⁹ endorsed the WHO programme and recommended specific action on endemic goitre and malignant malnutrition (kwashiorkor)

Field activities in nutrition were just beginning by the end of 1949. Joint projects with UNICEF are being planned for Costa Rica, El Salvador, Honduras and Nicaragua. In India, Pakistan and Syria, FAO has been co-operating in projects in connexion with malaria control programmes.

In the Palestine refugee camps a survey of nutritional needs was made and improvements were effected. WHO was represented at meetings on nutrition problems in Italy, and expert assistance was given to Guatemala and to the USA, where a consultant on Vitamin B₁₂ and the anaemias conducted seminars on these subjects.

Organization of Public-Health Services

One of the chief objects of WHO is to assist governments in developing efficient health services. Activities which aim to accomplish this object are described under the headings of public health administration, environmental sanitation, health education of the public and nursing.

Public health administration

A staff member from the Regional Office for the Eastern Mediterranean visited Israel, Lebanon, Pakistan and Syria to discuss existing services and ways of establishing satisfactory public health administrations. A consultant was supplied to Turkey to aid in the development of national health institutions. Ceylon has requested the assistance of a laboratory specialist in the development of a medical research institute. In Italy, WHO co-operated with the Italian Government and the Rockefeller Foundation in a project which investigated public health services and mapped out a programme for improvement.²⁰

Environmental sanitation

A short term consultant made preparations for the first session of the Expert Committee on Environmental Sanitation, which met in September²¹ to advise the Organization on environmental sanitation problems and projects. Consultant services were provided for the Italian Government health survey mentioned above and to the USA for advice on the collection and disposal of garbage and refuse. Sanitary engineers were

¹⁹ To be published as *W o l d H l t h O r g t e c h n R e p S e r* 1950 16 see also *Ch on W o l d H l t h O r g* 1950, 4 16

²⁰ *Ch on W o l d H l t h O r g* 1950 4 1—

W o l d H l t h O r g t e c h R e p S e r 1950 10 see also *Ch on W o l d H l t h O r g* 1950 4 1

During the year special epidemiological studies were made of yellow fever plague cholera smallpox African rickettsioses bilharziasis trachoma, poliomyelitis influenza rabies and brucellosis

Health Statistics

The Expert Committee on Health Statistics⁵ met to discuss methods of improving medical statistical services so as to facilitate comparability of data on an international scale. Acting on the recommendations of this committee the Second World Health Assembly approved an expansion of the WHO programme on health statistics and the necessary preparations to effect this expansion have been undertaken.

Volumes 1 and 2 of the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death* were published in English during the year.

Therapeutic Substances

Technical services relative to therapeutic substances include (1) biological standardization (2) unification of pharmacopoeias and (3) study and establishment of regulations concerning drugs liable to produce addiction. Decisions and recommendations of the Expert Committee on Biological Standardization²⁶ the Expert Committee on the Unification of Pharmacopoeias²⁷ and the Expert Committee on Drugs Liable to Produce Addiction (formerly the Expert Committee on Habit forming Drugs)²⁸ have been reported in previous issues of the *Chronicle* and their reports have been or will be published in the *World Health Organization Technical Report Series*.

Co ordination of Research

Important developments in activities concerned with the co ordination of research were realized in 1949.

The World Influenza Centre established at the National Institute for Medical Research London in 1948 had the opportunity of studying virus strains sent to the Centre following the influenza epidemic of 1948/49²⁹. Although the Centre was able to obtain valuable information from collaborating laboratories there is great need for information and newly

World Health Organization Reports	1950 5	see also Ch	World Health Organization 1949 3 46
World Health Organization Reports	1950 2	see 10 Ch	World Health Organization 1949 3 141
World Health Organization Reports	1950 1	see 150 Ch	World Health Organization 1949 3 10
World Health Organization Reports	1950 21	10 Ch	World Health Organization 1949 3 7
Chronicle of World Health Organization	1949 3 11 17		

Wrocław, Poland and the development of the Institut d'Hygiène of the University of Geneva into an international training centre

Fellowships

The WHO fellowship programme was greatly expanded during 1949. In all 207 fellowships were granted to individuals and to groups from 35 countries, 104 awards being made to 15 countries in Europe, 16 to 3 countries in the Western Pacific, 36 to 4 countries in South East Asia, 35 to 8 countries in the Eastern Mediterranean, and 16 to 5 countries of the Americas. The subject for which the largest number of fellowships was awarded in all regions was communicable diseases, the total being 91; other subjects for which a considerable number of awards was made included public health administration, maternal and child health, and surgery.

In addition to awarding these fellowships, WHO administered 27 additional ones financed by UNICEF.

TECHNICAL SERVICES

The technical services of WHO comprise those activities carried out at Headquarters which are concerned with providing governments with technical information on international aspects of diseases and public health. They include work on epidemiology, health statistics and therapeutic substances, the co-ordination of research and editorial and reference services.

Epidemiology

In administering the international sanitary conventions, WHO successfully settled a number of international quarantine matters out of court. Revision of these conventions and their compilation into a text of international sanitary regulations is proceeding under the guidance of the Expert Committee on International Epidemiology and Quarantine.²³

The epidemiological information service was expanded by the establishment on a permanent basis of the epidemiological radiotelegraphic bulletin which is broadcast daily from Geneva.²⁴ Epidemiological intelligence stations in Singapore, Alexandria and Washington have assisted in collecting and disseminating information for these broadcasts and for publications. Relevant publications include the *Epidemiological and Vital Statistics Report*, twelve numbers of which were prepared during 1949, and the *Weekly Epidemiological Record*.

²³ To be published as *World Health Organization Reports*, 1950, 20, see also *Chron. World Health Org.* 1950, 4, 46.
²⁴ *Chron. World Health Org.* 1949, 3, 35, 43.

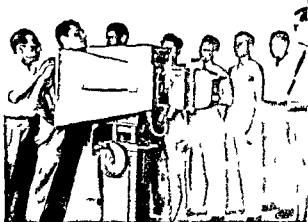
FIG 14 WHO IN THE FIELD



Malaria control in East Pakistan
Searching for mosquito larvae



Malaria control in Yugoslavia
Yugoslav school



Tuberculosis survey in Egypt
WHO survey



Venereal diseases survey in Afghanistan
D.J.C. Clinic

isolated strains to be sent more promptly. An unofficial conference on influenza, organized by the Centre, was held in London in July, specialists discussed international collaboration, giving special attention to the possibility of obtaining greater uniformity in the diagnostic techniques used in different laboratories. During the year, workers from various countries in Europe and from Egypt, India, and the USA visited the laboratory at the Centre to study techniques.

A Tuberculosis Research Office was established in Copenhagen in February 1949. This office is particularly concerned with the mass BCG vaccination campaigns being carried out by the Joint Enterprise. Members of the Research Office staff are attempting to elaborate a uniform system for analysing and presenting the data gathered from these campaigns.

By the end of 1949 the World Salmonella Centre, established at the State Serum Institute in Copenhagen and maintained by WHO, was collaborating with 31 regional salmonella centres. It had supplied laboratories with 2 059 test strains and 667 ampoules of test sera, amounting to about five litres of serum and had received for diagnosis 151 cultures, among which there were several new types which were analysed and descriptions of which were published.

Editorial and Reference Services

Publications

Because of budgetary limitations the output of publications was less than had been planned. The total number of pages published was 6,802 of which 258 were in Spanish, 296 in Russian and the rest in English and French.

During 1949 a great proportion of the WHO publications were distributed free of charge but despite this free distribution and the lack of publicity for the publications sales of the *Bulletin*, *Chronicle*, and *Digest* showed a satisfactory increase.

By the end of the year, the total number of medical and health periodicals with which WHO publications were exchanged amounted to 781.

Library and reference services

A progressive increase in the work of the Library reflected the development of the technical activities of the Organization.

A considerable part of the Library's resources was devoted to the preparation of orders for medical literature on behalf of requesting governments which often required prolonged search in bibliographical reference works.



Veneral disease in Somalia. A case of tertiary syphilis



Fig 9. Malnutrition in the Jordan Valley. A young child in Ghazal with a severe edema





Fig. Maternal and child health in India. VHO ; pediatric nurse in an Indian village.



Co ordination of medical abstracting

During 1949 WHO actively supported UNESCO activities in the co ordination of medical and biological abstracting and indexing services both by participation in meetings and by a financial grant

* * *

In evaluating the accomplishments of 1949 the Director General's report warns that the work accomplished will not be seen in true perspective until the many tasks still ahead have been completed

These tasks will have as their objective health as defined in the Organization's Constitution— a state of complete physical mental and social well being —and few of us probably yet realize the full significance of all the three elements of this definition. Health as a state of mental and social well being must be sought by most people today in a general environment which has little resemblance to that in which their forefathers lived. The attainment of health in these two senses must be measured in terms of the adaptability of the individual—and of groups and nations—to change in a world of ever more powerful aeroplanes of radio films and television and of weapons of war of a terrible efficacy. Progress in international understanding in good will and co-operation is today not only something good and desirable in itself it has become a prerequisite to survival."

THIRD WORLD HEALTH ASSEMBLY

Programme of Work

The Third World Health Assembly meets in Geneva on 8 May 1950. In the Assembly which is the supreme authority of the World Health Organization all the Member States are represented with equal rights. The Assembly meets each year in order to draw up the programme and the budget of WHO and to decide all questions concerned with the policy of the Organization. It appears appropriate to summarize the more important problems which will call for its attention this year.

Constitutional and Legal Questions

As in former sessions the Assembly must examine apart from the technical questions which form the principal concern of WHO a certain number of problems of a legal and administrative nature. WHO which is only in its third year of existence has been able to profit by the experience of the international health institutions which preceded it however its



Fig. 11. Tuberculosis control in Pakistan. Tuberculin testing a child in Karachi.

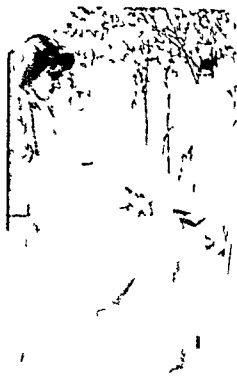


Fig. 12. Tuberculosis control in Yugoslavia. Performance of a Moro test in the village of Gnilan.



Fig. 13. Mental health consultant in the Philippines. Dr. E. E. Krapf lecturing to the Philippine Public Health Association.



Fig. 14. Medical services for Palestine refugees. WHO medical officer supervising the bullet wounds.

The programme approved by the First and Second Health Assemblies was based on a list of priorities in the forefront of which figured the control of tuberculosis malaria and venereal diseases environmental sanitation and maternal and child health The assigning of priorities a task which will also devolve upon the Third Health Assembly is always a delicate procedure requiring the balancing of the practically unlimited health needs of the world against the relatively modest resources available A danger is that more activities may be included in the programme than can be carried out effectively with a restricted budget In fact for financial reasons it will not be possible to carry out in 1950 all of the activities approved by the Second Health Assembly

The Third Health Assembly may find some difficulty in reconciling the desirability of the Organization's taking action in various fields with the necessity for utilizing the available budgetary resources to the best advantage However unlike the preceding Assemblies it can profit from experience acquired during a whole year of activity To assist it in its task it will have at its disposal two valuable working tools the *Annual Report of the Director General for 1949*⁴ which records what has been accomplished and the document submitted by the Director General under the title of *Proposed Programme and Budget Estimates for the Financial Year 1 January 31 December 1951*⁵ which tells what remains to be done It will also be able to draw inspiration from the reports of the Executive Board on its fourth⁶ and fifth⁷ sessions

The Assembly will also have to take decisions of a technical nature and recommend the use of certain preventive or therapeutic methods for combating disease This task will be relatively easy in the case of methods which have proved themselves such as the use of penicillin for the treatment of venereal diseases or of DDT for the control of malaria In other subjects however there may be controversy regarding the effectiveness of various methods Thus in the case of rabies the Assembly will have to decide whether or not it is advisable to sponsor trials of a new serum which is intended to replace or reinforce anti rabies vaccine

However before examining in detail the technical questions included on the agenda the Assembly must decide whether it is desirable for it to adopt two programmes concurrently the one for a year and the other for a long period There is no doubt that the drawing up of a long term programme would give WHO more confidence and would greatly contribute to awakening the interest of the governments and institutions destined to benefit from its services as well as strengthening their faith in the effectiveness of its methods These advantages and that of continuity of action

See page 19

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activities extend to fields in which international co operation has not been exercised until now, and, moreover, its Constitution gives it executive powers which the former health organizations did not possess

In the forefront of the constitutional problems comes that of representation on the Executive Board, a body consisting of 18 persons designated by as many members elected by the Assembly. The authors of the Constitution felt that the method of representation adopted would enable the decisions of the Assembly to be carried out by persons technically qualified in the field of health (Article 24) rather than by delegates following the instructions of their government. There have however, been differences of interpretation as to the functions of the Board, and for this reason one Member State has proposed an amendment of Article 24 of the Constitution. According to the terms of this amendment, which appears on the agenda of the Assembly, the Board would consist of 18 Member States who would appoint persons to serve as "representatives on it

Another important problem which the Assembly will have to settle is that of the frequency of its regular sessions. Certain Members would prefer the Assembly to meet only every other year, pointing to the resulting economy in time and money and to the advantages arising from a long term planning of the programme of work and of the budget. On the other hand a delegation by the Health Assembly of its powers for a longer period might be considered by some Members as unduly limiting their opportunities of contributing to the work of the Organization.

Problems connected with the membership of certain States, the admission of new Members or Associate Members¹, the election of members of the Executive Board and the notice of termination of the Rome Agreement of 1907, which established the Office International d'Hygiène Publique, are all of the same type. A solution will also have to be sought for the problems resulting from the decision of certain States to consider themselves no longer Members of WHO especially as concerns the proper distribution of financial responsibilities among the Members² and the calculation of the two thirds majority required for certain ratifications.

Technical Questions

The Assembly will devote most of its time to medical and technical problems. In particular, it will have to decide which diseases lend themselves to action on an international scale and what methods of combating them are most effective and economical.

¹ See page 156

² Cf. *on World Health Org.* 1947 I 11

Ch. on World Health Org. 1950 4 110

Assembly will have to review all the concrete problems raised in the different fields by the co operation of WHO with each of the international organizations. The participation by WHO in the programme for technical assistance for economic development of underdeveloped countries which will involve reciprocal relationships with many different agencies will create an imperative need for an effective machinery of co ordination.

Finally co ordination includes a negative aspect: the international organizations must endeavour to avoid multiplication and overlapping of programmes. This question also appears on the agenda of the Third Health Assembly.

RELATIONSHIP OF HUMAN AND SWINE INFLUENZA

Swine influenza was apparently unknown before the great pandemic of human influenza in 1918 and it is believed that the human virus became adapted and fixed in swine at that time. In a series of studies in the 1930s by Dr R. E. Shope at that time with the Rockefeller Foundation it was shown that the swine lungworm is the carrier of the swine influenza virus and transmits the virus through ova which happen to be laid in the lungs of pigs during or immediately after an attack of swine influenza. These infected ova are swallowed by earthworms which in turn are eaten by pigs. The ova are liberated in the pigs' intestine and migrate to the lungs where they develop into adult lungworms. During all this time which can last from one month to three years the virus is present in a masked form and reveals itself only when a susceptible pig harbouring these infected lungworms is subjected to what would ordinarily be a fairly innocuous stimulus e.g. a sudden change in weather. Symptomatic swine influenza occurs when along with the latent virus infection a secondary bacterial micro-organism, the widespread but usually harmless *Haemophilus influenzae suis* is present and sudden climatic changes intervene such as occur in the autumn. The virus and bacterial organism being widely seeded in pigs in a locality causes the striking picture of whole herds of swine in different farms being almost simultaneously affected with symptomatic swine influenza after a sudden cold or rainy spell.

The epizootiology of swine influenza is much better understood than is the epidemiology of human influenza. For example it is not at all clear where the inter epidemic reservoirs of the human influenza virus exist. There are at present no grounds for drawing an analogy between the helminthic reservoir as found in swine influenza and a similar parasite affecting man. The similarities of certain strains of swine influenza virus

were realized by the Second Health Assembly and led it to request the Board to draw up a long term programme. The Board has completed this task and will submit concrete proposals to the Third World Health Assembly.*

It may be anticipated that the elasticity of the general programme proposed by giving the Assembly the power to defer the implementation of certain parts of the annual programme from one year to the next will also make it easier to keep the latter programme within the limits of the budget.

Financial Questions

The programme and the budget represent, as it were, two aspects of the same problem. It is for the Assembly to decide whether the proposed budget of \$7,300 000 will enable WHO to carry out in 1951 the annual programme which it will have adopted and to apportion the amount among the various activities planned.⁹

Along with the budget, the Assembly will have to examine the *Financial Report, 1 January 31 December 1949*¹⁰ and, in adopting it, to approve the financial management for the past year. Other questions of a financial nature on the agenda concern the appointment of the external auditor for 1951, the status of contributions for each of the years 1948, 1949, and 1950, the establishment of the scale of assessments for 1950 and 1951, the working capital fund and the possible setting up of a world health defence fund.

Liaison and Co ordination

The activities of WHO extend to such varied fields that their success depends in large measure on the reception given to these efforts by other international organizations as well as on the help which the latter are disposed to give. In return, WHO must reciprocate when other groups wish to undertake tasks which, because of their nature or extent, are beyond their province and powers but which can be successfully carried through by calling international co operation into play.

Liaison and co ordination raise structural and functional problems. Among the structural problems are such questions as the desirability of establishing national commissions of WHO, the division of responsibilities for joint activities with the Food and Agriculture Organization and other United Nations bodies, and the principles governing the admission of non governmental organizations to official relations with WHO. Co ordination and liaison are dynamic rather than static in nature, however. The

Chron. World Health Org. 1950, 4, 99.

Chron. World Health Org. 1950, 4, 111.

Off. Rec. World Health Org. 27.

These conferences contributed significantly to the technical development and standardization of serological methods and antigens in the diagnosis of syphilis. It has been recognized that conferences of this kind are the only means of comparing efficiency in test methods of which as many as twenty different ones were compared at the past conferences. At the same time such conferences offer a rare opportunity for exchange of technical information among test authors.

The Interim Commission of the World Health Organization (1947) and its Expert Committee on Venereal Diseases pointed out the necessity of holding serodiagnostic standardization conferences. The First (1948) and Second (1949) World Health Assemblies emphasized the need for further standardization of serodiagnostic laboratory procedures in an effort towards greater uniformity in serological test performance. The Subcommittee on Serology and Laboratory Aspects (of the WHO Expert Committee on Venereal Infections) considered at its first session¹ an outline for a conference to be held in 1951 or 1952. This outline was approved at the fifth session of the WHO Executive Board². The planning of the conference has proceeded and Dr P. Krag, formerly Assistant Director of the State Serum Institute in Copenhagen, has accepted assignment with WHO to direct the conference, the site of which will be announced later.

In extending to authors of test methods an invitation to participate in the conference, the Director General of WHO lists the following reasons calling such a conference:

- 1 The continued use in all parts of the world of a great variety of test methods which often give divergent results
- 2 The appearance of new tests which were not evaluated at previous international laboratory conferences
- 3 The development of purified cardiolipin lecithin antigens (Pangborn)
- 4 The discovery of the treponema immobilization reaction (Nelson)
- 5 The general need for determining the most practical serodiagnostic methods for mass serological examinations

A suitable number of participants will be selected by WHO on the advice given by the Subcommittee on Serology and Laboratory Aspects—scientific, geographical and other factors being taken into account. Only an author, serologist or a serologist designated by him, will be allowed to perform the author's procedure during the conference; each author-serologist can enter several procedures, but only one may be accepted.

¹ Report to be published in *Id H H O g t h R p S* 1950 14 sec. 150 Ch. 11 *Id H H A O g* 1950 4 41.
² *Off. R.* 11 *Id H H O g* 25.

with those of human influenza virus are so great however that comparative studies of these two viruses are strongly indicated for the purpose of shedding light on the influenza problem as a whole. It is known, for example that swine are susceptible to human influenza strains of virus and it is possible that they may play some role in the epidemiology of human influenza.

In order to stimulate the clarification of this entire problem the XIVth International Veterinary Congress which met in London in August 1949 passed a resolution requesting the World Health Organization to undertake a comparative study of human and swine influenza virus at its World Influenza Centre in London. Dr C H Andrewes, in charge of the World Influenza Centre agreed whole heartedly to the request and arrangements have been made to submit strains of swine influenza virus isolated in various parts of the world to Dr Andrewes. Since there are several influenza like infections in pigs screening of the various agents involved in these diseases will be done at the US Public Health Service's Veterinary Virus Laboratory in Montgomery Alabama and in Professor W I B Beveridge's laboratory at Cambridge University. After screening to ensure that swine influenza virus is actually involved the strains will be submitted to the World Influenza Centre for further study. The screening procedure will also give an opportunity to define more clearly the etiology of different influenza like diseases in swine the most important of which is Ferkelgrippe a cause of great losses in pigs on the European continent.

The veterinarians working closely with Dr Andrewes on this problem are Professor W I B Beveridge Cambridge University, Professor T Dalling Chief Veterinary Officer United Kingdom, Dr H W Schoening Chief of the Pathological Division US Bureau of Animal Industry, Dr J H Steele Chief of the Veterinary Public Health Division US Public Health Service and M M Kaplan Veterinary Officer WHO. Professors Beveridge and Dalling and Dr Schoening were designated to carry out this work by the Permanent Committee of the XIVth International Veterinary Congress.

INTERNATIONAL CONFERENCE ON THE SERODIAGNOSIS OF SYPHILIS

International serodagnostic conferences were held by the League of Nations (1923 and 1928 in Copenhagen 1930 in Montevideo) and by the U S Public Health Service (1941 in Washington). In 1939 a similar conference planned in Copenhagen was cancelled because of the outbreak of war.

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¹ Report to be published. *World Health Organization Reports* 1949, 14, see also *Chronic Diseases of the World Health Organization* 1950, 4, 41.
² *Off. R. W. Id. H. H. O. g. 25*

Preliminary applications should be received by WHO not later than 15 July 1950. These applications should include the name, position and laboratory address of the applicant, together with other relevant personal and professional information, lists of scientific publications of the author, a detailed statement of the advantages offered by the special test and, in so far as possible, the names of laboratories at present using the particular technique.

Notes and News

Major General Sir Sahib Singh Sokhey

Major General Sir Sahib Singh Sokhey, formerly Director, Haffkine Institute, Bombay, has been appointed Assistant Director General of WHO. Dr Sokhey, who graduated in science (physics and chemistry) from the Punjab University in 1907, studied medicine at Edinburgh University where he graduated in 1911 and in 1912 also obtained the degree of Master of Arts. He then studied tropical medicine and hygiene in London and later took postgraduate courses in London and Toronto and at Trinity College, Cambridge, Johns Hopkins Hospital, Baltimore and Harvard University. From 1923 to 1925 he held a Rockefeller Foundation Fellowship.

FIG. 15. SIR SAHIB SINGH SOKHEY



In 1913 Dr Sokhey joined the Indian Medical Service, having obtained first place in a competitive examination in London. During the first World War he served with the Army in France, Egypt and Mesopotamia. In 1925 he was appointed Assistant Director of the Haffkine Institute, where he was in charge of the Department of Biochemistry; he became Director of the Institute in 1932.

Under his directorship the Institute—which is the leading medical research institute of India—underwent great expansion: the number of scientific workers rose from 10 to 40 and the annual budget was increased from Rs. 200,000 to 3,000,000. Six new departments—Department of Clinical Pathology, Department of Antitoxins and Sera, Department of Chemotherapy, Department of Nutrition, Department of Ento-

mology and Department of Pharmacology—each under the charge of an Assistant Director were added to the three original departments — Department of Vaccines Department of Rabies and Department of Biochemistry The Institute is now considered one of the best equipped and the most active laboratory of India for medical research and the production of the urgently needed biological products and drugs

Dr Sokhey has made many important contributions to the work of the Institute His early research was devoted mainly to studies on metabolism on the neutralization of mineral acids by the body on the effect of insulin on calcium metabolism on fat metabolism in sprue on metabolic rate in normal Indian men and women and on haematology After becoming Director his work included the development of quantitative experimental methods for studying plague infection plague immunity and the value of therapeutic agents in plague infection the development of a biological method for the assay of plague vaccine the preparation of a new plague vaccine and a new anti plague serum numerous studies on the therapeutic value of sulfonamides and antibiotics in the treatment of experimental plague and extensive clinical trials of these substances in the field In addition he has worked out a method for the biological assay of cholera vaccine and has prepared a new cholera vaccine and developed large scale methods of producing plague and cholera vaccines Under his direction large scale methods of preparing antimalarial and sulfa drugs have also been developed at the Institute

WHO Antimalaria Activities in Pakistan

In a report received at WHO Headquarters Dr G Gramiccia leader of a WHO malaria demonstration team gives data obtained from a post spraying survey completed recently in Pakistan This survey revealed that spleen rates in the treated villages dropped to less than one third of those prevailing in June 1949 the figures before and after spraying being 74.5 % and 21.2 % respectively In the unsprayed villages on the other hand the rates increased from 74.5 % in June 1949 to 81.1 % in January 1950 The parasite rates showed similar though less spectacular differences 5.78 % in sprayed areas and 18.2 % in unsprayed areas

Entomological observations have shown that DDT continued to be effective six to seven months after spraying A remarkable discovery is that these results were obtained in the sprayed areas despite replastering and renovation of most of the houses The DDT deposit on the untouched articles and walls was sufficient to protect the whole house against mosquitos From these observations it is inferred that the customary repairs to houses and cowsheds at the end of the rainy season are unlikely to obstruct the success of antimalaria operations

Since a proportion of the enlarged spleens in the sprayed areas are probably due to prevalence of kala azar arrangements have been completed for a simultaneous investigation of this disease The Government of East Bengal has assigned two doctors and two health assistants to the WHO team and the former are now receiving the necessary instructions in kala azar capillary tube tests

Another activity of the WHO team in the forthcoming malaria season will be to determine the effect of DDT spraying on agricultural production in terms of possible increase in labour capacity resulting from improvement in health of a malaria free population An agricultural officer has been attached to the team by the East Bengal Government to obtain reliable statistical data on this question

BCG Vaccination in Pakistan

Since the beginning of the BCG vaccination campaign organized by the United Nations International Children's Emergency Fund with the technical assistance of

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Diacetylmorphine is considered as one of the derivatives of morphine most likely to result in addiction. Although it is no longer used in 24 countries it is still used in others. Furthermore the production of diacetylmorphine continues to increase. Justifiably alarmed by this situation the Expert Committee on Drugs Liable to Produce Addiction³ stressed the importance of obtaining detailed information on the reasons for employing this substance in certain countries and in addition on the possibility of abandoning its use. In point of fact there are other morphine derivatives as well as new synthetic products which since they have properties analogous to those of diacetylmorphine may induce doctors to cease using this substance.

Dr H. Fischer, Professor of Pharmacology at the University of Zurich, Switzerland and member of the Permanent Central Opium Board and of the Drug Supervisory Body has come to the following conclusions:

If one takes into consideration the harm brought about in the world by diacetylmorphine since its appearance and the thousands of heroin addicts who have fallen victims to the drug the disappearance of diacetylmorphine from world markets could only be considered as a boon and a step in the right direction.

In order to attain the required goal—the complete abolition of heroin—a scientifically and psychologically planned propaganda campaign should be inaugurated to convince doctors and governments the world over that the complete abolition of diacetylmorphine is an urgent necessity in the struggle to curtail the use of drugs which are a menace to public health.”⁴

Danger of Indiscriminate Use of Streptomycin

The Executive Board at its fifth session held in Geneva from 16 January to 2 February 1950 invited the Director General of WHO to draw the attention of governments to the inadvisability of unrestricted distribution and indiscriminate use of streptomycin. The following reasons were given:

1. In spite of reduced toxicity of new forms of streptomycin the drug must still be considered dangerous.
2. Precise knowledge as to its clinical indications especially in pulmonary tuberculosis is still lacking.
3. The attention of the public may be focused on this drug to a degree out of all proportion to its value in the total campaign against tuberculosis.

Second Seminar on World Health

The success of the first Seminar on World Health organized by the World Federation of United Nations Associations (WFUNA) and held during the Second World Health Assembly⁵ has prompted the planning of a similar gathering to be held in Geneva from 8 to 19 May 1951 during the Third World Health Assembly.

Participants will be selected through national and student associations affiliated with the WFUNA. Twenty seven medical students and young doctors from nine different countries attended last year's seminar.

Although WHO will not be associated officially with the seminar the Organization is giving it full co-operation and moral support and is urging governments to do so as well.

Additional information concerning the seminar may be obtained from the World Federation of United Nations Associations Education Commission UNESCO House 19 Avenue Kléber Paris 16^e.

See Ch. II, *WHO* 1949 3 9 1950 4 76

Off. R. II, *WHO* 19 33

Ch. II, *WHO* 1949 3 68

WHO 65 014 persons have been tuberculin tested. More than 25 000 were found to be reactors and of the non reactors more than 19 000 have received BCG vaccination.

Formation of Antituberculosis Centre at Istanbul

Dr E. Berthet, tuberculosis officer of the Department of the Isère (France) and a WHO expert consultant has been studying the setting up of an antituberculosis programme in co-operation with the Turkish health authorities.¹ A sum of £(Turkish) 200 000 has been allocated by the Turkish Ministry of Health to finance the construction of an antituberculosis demonstration and training centre in Istanbul. The Antituberculosis League of this city will contribute an equivalent sum towards the realization of this project. WHO will provide equipment for the centre which will be run by a team of specialists from the Organization.

In addition the Turkish Ministry of Health and Dr Berthet have planned a tuberculosis instruction programme which will be carried out by specialists from WHO and from the Universities of Istanbul and Ankara. These combined measures should enable tuberculosis which at present causes nearly 200 deaths per 100 000 inhabitants in Turkey to be effectively controlled.

Tuberculosis Control in South East Asia

Training and teaching centres for antituberculosis work will be set up in Burma, Ceylon, India and Thailand under the auspices of WHO and the United Nations International Children's Emergency Fund.

Dr E. McWeeney left Geneva on 16 March 1950 to take up the duties of Regional Tuberculosis Consultant for South East Asia. Dr McWeeney, formerly Senior Medical Inspector in the Department of Health of Ireland, where he directed the tuberculosis services, is the author of various papers on the technical and administrative aspects of tuberculosis control.

The construction of centres at Delhi and Patna in India has been financed by the Indian Government. A third centre will be set up at Travandrum in the south west of India with the assistance of Dr W. H. Tyler, WHO consultant on laboratory techniques relating to tuberculosis.²

Modern methods for the prevention, diagnosis and treatment of tuberculosis will be taught in these different centres to the medical profession and to other technical personnel.

Medical Training Centres in Europe

Centres in anaesthesiology will be established in Copenhagen and Prague under the auspices of WHO. Modern techniques of anaesthesiology will be taught to doctors from the Scandinavian and Central European countries respectively.

Other teaching centres will be set up in Poland. One of them will be situated at Wrocław and will give training in biochemistry; the other established at Warsaw will deal with venereal disease control.

Use of Diacetylmorphine in Medicine

In a circular letter sent to governments, the medical profession and the authorities in all countries have been invited to make known their views regarding the necessity of using diacetylmorphine (heroin) in medicine and on the possibility of dispensing with its use.

¹ *Ch. on H. 11 Hlth. Org. 1950 4 63*

Ch. on H. 14 Hlth. Org. 1949 3 9

to whom they give treatment it is absolutely useless to vaccinate on the basis of the PR₈ strain if the epidemic is caused by the FM₁ strain" *

Politics in International Health Work

Dr E S Rogers Dean School of Public Health University of California Berkeley discusses the political implications of international health work with particular reference to the Second World Health Assembly (at which he was a delegate) in an article published in the *Journal of American Dietetic Association* Baltimore Md (1950 26 15)

Those of us who are career people in public health like to believe that our work is largely removed from political considerations and that there is within the brotherhood of medical science and public health an underlying current of common objectives and friendliness that tends to minimize international differences. Nevertheless it would be quite unrealistic to perpetuate the illusion that matters of international health are any longer capable of being isolated from international politics. One cannot truly promote international health for example without the free exchange of information between nations. This cannot be accomplished fully without free exchange of persons between nations. Similarly matters of world health cannot be solved without the use of materials and supplies. These in turn cannot be procured or distributed through mechanisms that are independent of the problems of international trade and world economics.

Our meetings therefore were by no means devoid of outbursts of a political nature as the representatives of nations jockeyed in open forum in committees or in conversations in attempts to reach understanding and to obtain support for those things which they believed to be desirable. Sometimes these conflicts surged to a considerable degree of heat and accusations quite foreign to the problems of public health were hurled from the rostrum. I am gratified to say

however that in general the problems we encountered proved capable of rational resolution."

Elimination of Plague

In an editorial of the 18 February 1950 issue of the *Medical Officer* London (1950 83 63) some interesting comments are offered concerning an article published in the *Chronicle*¹ in which it was stated that in the present state of knowledge it is not possible to envisage the immediate worldwide elimination of plague since that would require eradication of infection in wild rodents over vast areas."

It is uncertain states the editorial in the *Medical Officer* to what extent wild rodents are concerned in the spread of plague. Man generally has little intimate contact with wild rodents but some of them are used for food chiefly hares and rabbits which are known to be subject to infection with *Pasteurella pestis*. Control of hares is considered very important in the southern half of Africa where small local epidemics of plague are reputed from time to time. Others of the wild rodents are also known to harbour plague. These though they might not infect man directly might do so indirectly by spreading the parasite to domestic rodents rats and mice. Destruction of rats is the main element in suppressing plague where this is carried out vigorously plague does not occur and in places where epidemics of plague spring up a vigorous anti rat campaign soon brings an epidemic to an end. Outside the great endemic areas of Eastern Asia plague occurs mainly in ports as we should expect but it has cropped up in various parts of Africa where it seems unlikely that it could have been introduced by rats infected in Asia. So there is much evidence to suspect native rodents though also to believe that native rodent spread plague is mild infrequent and of low infectivity to man. It may therefore be that eradication of infection in wild rodents which at present is impossible may be proved not to be absolutely necessary.

Two Applications for Admission to WHO

The governments of the Republics of Indonesia and of Viet Nam have applied for membership in WHO and their applications will be considered by the Third World Health Assembly. According to the WHO Constitution States which do not belong to the United Nations may be admitted as WHO Members by a simple majority of the Health Assembly.

Associate Membership Requested for Southern Rhodesia

The United Kingdom has requested Associate Membership in WHO on behalf of Southern Rhodesia. This request the first of its kind to be received by the Organization will be examined by the Third World Health Assembly.

WHO is the only United Nations agency which grants Associate Membership to territories not responsible for the conduct of their international relations. According to the WHO Constitution admission is granted by a simple majority decision of the Assembly. The rights and obligations of Associate Members in WHO regional organizations were defined last year by the Second World Health Assembly. Associate Members can participate in Assembly and Regional Committee meetings; delegates must be technically qualified and chosen from the native population.

Views on WHO

Influenza Epidemic of the Winter of 1948/49

In a lecture given in Lausanne summarized in a recent number of the *Journal suisse de Pharmacie* Zürich (1950 88-69) Dr G. Weissflog gives some information regarding the influenza epidemic of the winter of 1948/49 and stresses the importance of the activities of WHO in this field.

The classic strains of influenza virus of the antigen A type are PR₈ FM₁ and Weiss. The best known in the B group is the LEE strain. It is recognized as a certainty that only the vaccine specific for any particular strain is effective against it. Only a rapid identification at the beginning of the epidemic makes it possible to produce the specific vaccine in sufficient time. In 1948 the World Health Organization set up an influenza centre in London and submitted to its Member States a project for collaboration in this field. The example furnished by last winter's epidemic is very instructive.

In mid December 1948 a widespread influenza epidemic raged in the south of Italy. In 30 days the epidemic reached our frontier. From 5 December 1948 to 5 March 1949 8 142 cases were reported in Switzerland. In 25% of the cases infection by the FM₁ strain was clearly established. An increase in antibodies due to infection with the LEE virus was observed in only one patient. Thus our results which were obtained indirectly agreed with those of other workers who had isolated the FM₁ virus.

The following conclusions can be drawn from the foregoing: the project for setting up observation stations suggested by the World Health Organization can be of very great service; a laboratory for research on influenza necessitates extensive preparations; the supply of fertilized eggs and the provision of an incubator satisfying all requirements should be ensured; hospitals and physicians should be required to take samples of both the early and the late sera as well as of the garglings of the first patients.

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CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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RECENT AND FORTHCOMING MEETINGS

11 14 April	WHO Expert Committee on Health Statistics Subcommittee on Hospital Statistics Geneva
11 15 April	WHO Expert Committee on Antibiotics first session Geneva
17 21 April	WHO Expert Group on Prematurity Geneva
17 22 April	WHO Expert Committee on Rabies first session Geneva
18 21 April	WHO Expert Committee on Health Statistics second session Geneva
20-29 April	WHO Expert Committee on the Unification of Pharmacopoeias sixth session New York
May	WHO European Health Conference to consider the establishment of a Regional Office for Europe tentatively Geneva
8 May	Third World Health Assembly Geneva
30 31 May	Joint Committee on Health Policy UNICEF/WHO Geneva
1 June	WHO Executive Board sixth session Geneva
August	WHO Expert Group on School Health Geneva
28 August	Joint ILO/WHO Committee on Occupational Hygiene first session Geneva
2 September	
September	WHO Expert Committee on Tuberculosis fifth session
September	WHO Committee for the Study of Chemotherapeutics in Tuberculosis
September	WHO Expert Committee on Venereal Infections Subcommittee on Serology and Laboratory Aspects second session tentatively Paris
September	WHO Regional Committee for South East Asia third session Colombo
4-7 September	WHO Regional Committee for the Eastern Mediterranean third session Istanbul
8 September	WHO Regional Conference on Statistics Istanbul
11 16 September	WHO Expert Committee on Mental Health second session Paris
October tentatively	WHO Expert Committee on International Epidemiology and Quarantine third session Geneva
9 14 October	WHO Regional Committee for the Americas second session Pan American Sanitary Organization Directing Council fourth meeting Ciudad Trujillo

INCREASING PRODUCTION OF ANTIBIOTICS

First session of the Expert Committee on Antibiotics

Antibiotics do not represent merely a momentary or transient phase in the history of therapeutics. Every day the results of current research show how great are the possibilities of treatment with antibiotics and justify the international interest at present being taken in their production. Six antibiotics—penicillin, streptomycin, chloromycetin, aureomycin, tyrothricin and bacitracin—are already being produced on a commercial scale in a number of countries.

Since penicillin first became widely used, for example, in programmes for the control of venereal diseases, many countries have experienced great difficulty in obtaining it in the quantities required for the general application of this therapy. It has therefore been found necessary to stimulate production of the more important new antibiotics on a national scale.

The First World Health Assembly recognized that

the immediate object of WHO in this field should be to make technical knowledge on penicillin production available to countries contemplating the erection of plants, to facilitate procurement of penicillin for countries unable to obtain this and similar drugs.¹

Since then efforts have been made to put into production the penicillin plants supplied by UNRRA to certain countries.²

Difficulties to be Overcome

The Expert Committee on Antibiotics, which held its first session in Geneva from 11 to 15 April 1950³ studied ways and means of giving assistance to countries requiring it in connexion with the drawing up of plans and the installation and operation of antibiotic plants. The com-

Off. R. W. Id. H. h. O. g. 18 164

Ch. H. o. Id. H. h. O. g. 1949 3 53

The following report is at this meeting

Member

Prof. E. R. V. Christie, Professor of Biochemistry, University of London, St. Bartholomew's Hospital

London, United Kingdom (Representative)

Professe. M. M. J. t. Professe. r. A. l. F. c. l. t. d. Ph. m. i. e. d. l. U. n. i. v. e. r. s. i. t. é. P. r. i. France (Pice-Chalman)

Professe. H. Th. rell, Professor of Biochemistry, Director, Section of Biochemistry, Nobel Institute of Medicine, Stockholm, Sweden

Professe. S. A. Wakam, Ch. r. m. Dep. r. t. m. e. t. f. Microbiology, Rutgers University, New Brunswick, N.J., USA

Secretary

Dr. Melni C. ipe u. Co- o. d. i. t. o. of Research Section, WHO

The report of the committee will be published in the World Health Organization Technical Reports

mittee analysed the difficulties encountered in this respect in certain countries and found that they were threefold

- (a) difficulty in obtaining plans or blueprints ,
- (b) difficulty in procuring the necessary equipment ,
- (c) lack of trained personnel to operate the plants efficiently

With regard to the first point, the committee recognized that governments are obviously free to purchase plans from private firms either in Europe or in the USA, but it recommended that WHO, in collaboration with the United Nations and its other specialized agencies should assist countries which for financial reasons are unable to obtain plans in this way

FIG 1 EXPERT COMMITTEE ON ANTIBIOTICS FIRST SESSION



Left to right (seated round table) Professor S. A. Waksman (Chairman), Professor R. V. Christie (Rapporteur), Dr S. S. Sokhey (Assistant Director General WHO), Professor E. B. Chain (Chairman), Dr Melanie Craipeau (WHO), Mme Y. Bezoari (WHO), Professor H. Theorell

With regard to the second difficulty the committee stressed that certain items of equipment—at present manufactured in only a very small number of countries—are essential for the efficient production of antibiotics. Such items include Podbielnik extractors for the production of penicillin and special stainless steel equipment for use in the preparation of streptomycin. In the course of the discussions the committee considered the risk entailed in the possible use of the extractors for military purposes. It was unanimously agreed however that in the present state of knowledge the extractors could not be used for such purposes. The committee therefore recommended that WHO should do everything possible to assist Member States to procure suitable equipment.

Adequate equipment is of course necessary but it cannot be considered the only indispensable factor. It would be useless to install plants in countries which do not have the personnel to operate them. The lack of highly trained personnel remains the most serious obstacle to the production of antibiotics in several countries. The committee considered that the training of competent personnel is the most important factor in the production problem and devoted much time to a consideration of this subject.

Technical Training in Antibiotics

The production of antibiotics is a complex process involving various methods of microbiology, chemistry and pharmacology and a new branch of engineering known as microbiological engineering. Such extensive knowledge can only be acquired by teams of research workers and technicians who are already well acquainted with the fundamental principles of these various branches of science. At present most universities are unable to provide the comprehensive training required for such highly specialized work. Some provision should therefore be made for the training of specialists in centres which are devoted particularly to research and to study of the technique of antibiotic production.

The committee examined the various possibilities offered by official institutes in Europe and in the USA and recommended that WHO should approach those institutions in various countries which could provide facilities for the training of specialists on an international scale and in particular for the training of WHO Fellows. From this point of view the Istituto Superiore di Sanità, Rome, which has a pilot plant, offers particularly favourable conditions. This institute has experimental semi-scale and full-scale equipment for all stages in the manufacture of penicillin; this equipment includes fermentation vats with capacities ranging from 50 to 18 000 litres. Microbiological research is carried out along with pharmacological research. The institute will be able to accommodate 14 research workers each year to specialize either in biochemistry and microbiology or in microbiological engineering. The Department of Microbiology of Rutgers University, New Brunswick, N.J., USA, could also this year take a few students specializing in microbiology. WHO will negotiate with other institutes in Europe and in the USA on the same subject.

The committee particularly emphasized that such specialist training in antibiotics should be given in centres where the atmosphere is conducive to research. The science of antibiotics is in the process of evolution and new substances will probably still be discovered. Persons intending to specialize in this subject should not only become thoroughly versed in one particular method of antibiotic production but should also acquire the

general knowledge which will enable them to follow the developments in this branch of science and possibly to make contributions of their own. On their return to their respective countries, the specialists thus trained would be able to install plants thus obviating the main difficulties which have so far faced their governments. The committee therefore recommended that WHO should allocate fellowships for the training of specialists who, during their training, could take part in research and acquire the most up to date knowledge on the production of antibiotics.

* * *

Some apprehension was expressed regarding the financial risks which governments would have to face in installing plants whose equipment might soon become obsolete. The committee did not consider that the risk involved would be very great because the equipment required for the preparation of the antibiotics known at present could subsequently be used for the production of any others which might be discovered. Such fears should not prevent governments from immediately taking steps to install such equipment.

Research on Treatment with Antibiotics

Countries where antibiotics are available only in small quantities have a certain advantage. They more easily than others, can group patients for treatment in a small number of centres where antibiotic therapy can be applied under controlled conditions and where the results can be compared with those obtained with other drugs and, also, in untreated control groups.

The committee suggested that such clinical research should be undertaken under the auspices of WHO in areas where antibiotics of proved value are in short supply. Such an experiment would have the added advantage of arousing interest in the use and production of antibiotics in countries where they are as yet little known.

A list should be drawn up of centres with adequate laboratories and qualified personnel—trained perhaps by means of fellowships. It must be ascertained that the number of patients is sufficient for the results of treatment to be statistically significant. Various institutions, the national medical councils, and some of the WHO expert committees, such as those on tuberculosis and venereal infections, should be asked for suggestions concerning the practical application of these projects.

Type-Culture Collections

There is an urgent need for improving the existing system of obtaining type cultures capable of producing antibiotics. With the development of production there will be an increasing demand for collections of type-

cultures whose properties are kept constant and whose antibiotic producing capacity is duly controlled. Existing centres responsible for type culture collections should be approached. The committee recommended that WHO should ask these centres whether they would be willing to serve as official centres for the collection and distribution of certain strains of antibiotic producing organisms and of antibiotic sensitive cultures for testing antibiotic activity.

Abstracts

The enormous number of scientific publications dealing with antibiotics is such that it is practically impossible for workers in this subject to keep abreast of them all. The committee therefore recommended that the Director General should ask the Co-ordinating Committee on Abstracting and Indexing in the Medical and Biological Sciences to examine the most effective means of establishing a rapid and comprehensive abstracting service for antibiotics. The abstracts in question should be issued in the form of separate fascicles.

Symposium and Congress

The committee discussed the advisability of organizing in 1951 a symposium at which certain aspects of the problem of antibiotics would be discussed and in 1952 a general congress on antibiotics. It recommended that these two proposals should be submitted to the Council for the Co-ordination of International Congresses of Medical Sciences.

STREPTOMYCIN AND TUBERCULOSIS

Experts from ten countries¹ met in Paris in February 1950 under the auspices of the United Nations International Children's Emergency Fund (UNICEF) and WHO to compare results obtained in the treatment of tuberculous meningitis by streptomycin. Reports were submitted particularly by countries in which there are streptomycin treatment centres and which receive supplies of streptomycin from UNICEF.² Various topics were discussed such as the diagnosis of tuberculous meningitis, the routes by which antibiotics may be introduced into the meningeal spaces, posology, neurosurgical operations, examination of the cerebrospinal fluid, the concentration of streptomycin in the body fluids, electroencephalography

¹ List of participants in the meeting see p. 164.
² Cf. *World Health Org.* 1949, 3, 281.

accidents due to streptomycin, and treatment with combinations of drugs. All of this work showed that important results had been achieved which permitted a deeper understanding of streptomycin therapy and, at the same time, raised new questions.

A working party dealt particularly with the implementation of the programme outlined jointly by UNICEF and WHO. It recommended that streptomycin should be reserved for the treatment of tuberculous meningitis, miliary tuberculosis, and primary infections when generalization may be imminent; the treatment of other forms of tuberculosis in children which are amenable to this therapy could however be considered in case of necessity.

It would be desirable to establish streptomycin subcentres to make this treatment available to a greater number of cases. But care must be taken to keep the standard of treatment high and to have it administered by specialized personnel. In this connexion the working party urged governments to avail themselves of the offer of fellowships for the training of specialists in streptomycin therapy. Close collaboration should be established between the centres in each country and between those in different countries.

Some of the recommendations concern the work of responsible staff in the streptomycin centres themselves.

Variations in the potency and toxicity of streptomycin have been noted. Such variations should be reported without delay, together with details useful in the study of this problem.

A need for a uniform method of recording results has been felt. In addition, the centres should submit quarterly reports indicating the total number of cases treated, the number of children under treatment at the beginning and at the end of the period under consideration, the number of those who began or who finished treatment during this period, and the number of deaths recorded. An individual form for each case treated was proposed.

The working party expressed the desire that the countries who receive streptomycin through UNICEF should adhere to the standards established with regard to diagnosis and treatment. It adopted general recommendations for the current treatment of tuberculous meningitis in children and concerning its detection at an early stage. It recommended the combined use of streptomycin and other antibiotics.

EXPERTS ATTENDING THE STREPTOMYCIN MEETING

Professeur E. Bernard Paris France
Professeur M. Bernheim Lyons France
Dr A. Breton Lille France

Professeur J. Chaptal Montpellier France
Professor C. Choremis Athens Greece
Professor C. Cocchi Florence Italy

Professor G Daddi Rome Italy
Dr M Daniels London United Kingdom
Professeur R Debré Paris France
Professeur R Du Bois Brussels Belgium
Professor D S Eleftheriou Athens Greece
Dr G Fanconi Zurich Switzerland
Dr J Fouquet Paris France
Professeur P Giraud Marseilles France
Dr J Houstek Prague Czechoslovakia
Dr Edith Lincoln New York City USA

Professor E Lorenz Graz Austria
Dr A Monbrun Paris France
Dr P Mozziconacci Paris France
Dr R Neubauer Belgrade Yugoslavia
Dr O Ruziczka Vienna Austria
Dr Honor Smith Oxford United Kingdom
Dr K Todorović Belgrade Yugoslavia
Dr I Vanaanen Rovaniemi Finland
Dr O Wasz Hockert Helsinki Finland
Dr A Ylppö Helsinki Finland

INTERNATIONAL COMPARABILITY OF HOSPITAL STATISTICS

Mortality statistics are a valuable source of information but they give only an incomplete picture of the health conditions of a population an accurate picture requires statistics on both fatal and non fatal types of illness Interest in the methodical preparation of morbidity statistics goes as far back as the middle of the last century However progress in this field has been very slow hampered as it was—among other factors—by the absence of a suitable list for classifying diseases The recent adoption by WHO of an international classification covering both diseases and causes of death will permit full use of the ever increasing volume of morbidity data

Complexity of the Problem of Morbidity Statistics

Before any statistical classification can be applied to basic data *fundamental concepts must be defined and rules for the preparation of statistics formulated*

Although classification methods for mortality data are based on long experience the systematic compilation of morbidity statistics is of fairly recent date Moreover the question of morbidity statistics is much more complex than that of mortality statistics In the case of multiple causes of death it has been decided to select the underlying cause for primary tabulations in multiple morbidity one or the other cause might be of special interest depending on the type of information desired Further more in mortality statistics the underlying cause is selected irrespective of other stages in the development of the morbidity process prior to death in morbidity statistics the interest is concentrated mainly on the phase of the disease process which is responsible for the period of illness

The *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*¹ sums up as follows the complex problem of morbidity data

Morbidity is far less definite than mortality and represents a dynamic rather than a static phenomenon. The occurrence of death is a definite event and the number of such events can be counted. An illness on the other hand varies from a minor deviation from normal health which does not interfere with the performance of regular duties or activities to the chronic case which calls for bedside or custodial care for an indefinite period. Furthermore an individual afflicted with a disease may experience only one period of illness during the interval of observation or may have repeated illnesses from the same disease. In addition during the same period of illness an individual may suffer from two or more distinct diseases. Thus the basic problem as to what is to be counted becomes very complex and it can be easily seen that the application of the present classification to morbidity statistics cannot be laid down as precisely and relatively simply as in mortality. The application will vary depending on the kind of morbidity experience to be studied and on the purposes to be served by the statistics.

Unification of Hospital Statistics

'Hospitalized illness' represents that part of the total morbidity in the general population which receives hospital care, it is the admission for hospital services and treatment which defines hospitalized illness. Thus its concept is free from the uncertainty in defining illness in general which is due to the difficulties of obtaining a clear cut distinction between illness and health. However, relatively simple though this concept may be, many methodological aspects involved in general morbidity statistics are also common to hospital statistics.

There are at least three basic statistical groups to be considered in hospital morbidity statistics, i.e. hospitalized individuals (whether for the first time or not) number of admissions, and number of different morbid conditions comprising the total hospital morbidity. An individual may be admitted to a hospital one or more times during a certain period, and his case may give rise to one or more diagnoses counted in the total hospital morbidity. In cases of multiple morbidity, there may be a condition which describes best the necessity for hospitalization and which constitutes the index case in the patient's hospital record, other conditions may be either independent of this cause or related to it. A patient repeatedly admitted to a hospital during a certain period may have each time a different illness or may be hospitalized repeatedly for the same morbid condition. Consequently, hospitalized illness may be analysed as a 'person' concept in terms of individuals or as a 'patient' concept in terms of admissions. In the first case, persons admitted several times may be studied from the

¹ Bull. World Health Org. 5 pp1 1 1948 1 p xxxv and xxxvi

standpoint of determining whether the repeated hospitalization is due to the same or to different complaints. Hospital morbidity can also be examined in terms of the condition which brought the patient to the hospital or in terms of total morbidity. In the latter case multiple morbidity must be qualified as to the relationship to the principal diagnosis in order to allow an unduplicated count of morbid entities.

The principal and contributory diagnoses present another thorny problem to the statistician. Medical records often contain several diagnoses. All the conditions in a case of multiple morbidity may have contributed to the necessity for hospitalization. However there can be selected a principal diagnosis which is a major factor in the illness and responsible for hospitalization; the other diagnoses are contributory whether they are related to the principal diagnosis or not.

The *Manual for Coding Causes of Illness* (US Public Health Service Miscellaneous Publication No. 32, Washington, 1944) defines the principal diagnosis as 'the one which was chiefly responsible for the period of hospitalization, i.e. the one that led the patient to seek hospital care'. This *Manual* also gives descriptive details for multiple morbidity in terms of principal and contributory diagnoses.

The standard form used in the national morbidity survey in England and Wales provides another example of diagnosis classification. The general definition of the principal diagnosis as applied in England and Wales is in its broad outlines similar to that given in the US Public Health Service *Manual*. Also the specific examples as to type of principal diagnosis supplied in the *Manual* under rules for selecting the principal diagnosis are in alignment with the specifications in the English classification system.

However there is one marked difference between these two systems in the application of the general definition in the case of a disease complex with an underlying and a secondary condition. In the USA a complication existing before admission may appear as the principal diagnosis for this particular hospitalization, e.g. a brain abscess resulting from bronchiectasis will be entered as the principal diagnosis, bronchiectasis being entered as a contributory condition. In England and Wales the underlying condition always determines the principal diagnosis regardless of whether the complication supervened before admission to the hospital. Which of these two practices should be given preference? A complication, especially if serious, will determine the need for hospitalization more accurately than the underlying condition which, in the absence of complications, might not perhaps require hospitalization. On the other hand it can be argued that in complicated morbidity both conditions will require medical care and that the order of their registration is of little importance. Furthermore if it is the underlying cause which is used as the principal diagnosis in cases of repeated admission, irrespective of the appearance of complications, it will serve to

indicate the persistence of the basic morbidity process and thus prove useful for certain types of study

An Expert Subcommittee on Hospital Statistics was set up by WHO to deal with these problems and others involved in hospital statistics. This subcommittee held its first session in Geneva from 11 to 14 April 1950^{*} and submitted its report to the Expert Committee on Health Statistics, which approved it with the addition of a few comments.

In its study of the procedures for recording principal and accessory diagnoses the subcommittee recognized that the choice between the American and the English practices should depend on which would be more profitable in the long run. It decided to recommend the method used at present in England and Wales with the addition that notation should be made as to whether a complication is present when the patient is admitted to the hospital. Following acceptance of this proposal by the Third World Health Assembly States will be required to supply the following information regarding diagnoses:

- I Principal disease injury or other condition which led to admission to a hospital
- II Principal complication(s) of I (stating the most important one first and indicating whether present at admission),
- III Principal accessory acute condition (stating whether present at admission),
- IV Principal accessory chronic condition

The underlying cause should be entered in I if a complication in II was also present at admission even though the admission was due to that complication and in tabulation of statistics according to the principal cause of admission common combinations of an underlying cause with complication should be distinguished.

^{*} The following were present at this meeting:

Members

- Dr E. L. Crosby Director, Johns Hopkins Hospital, Baltimore, Md., USA
Dr Marie Lindhardt Head, Statistical Section, National Health Service of Denmark, Copenhagen, Denmark (*Chairman*)
Professor J. Razuhin Professor of Social Medicine, University of Zagreb, Yugoslavia
Dr P. Stocks Chief Medical Statistician, General Register Office of England and Wales, London, United Kingdom (Member of WHO Expert Committee on Health Statistics)

Observer

- Dr M. de Vlado Social Security Section, ILO

Secretariat

- Dr M. Pasqua Deputy Director, Division of Health Statistics, WHO (Secretary)
Dr Marie Cakrto International Nomenclature of Diseases and Causes of Death Section, WHO
Dr P. Foltz Medical Director, Ospedale San Giovanni di Torino, Turin, Italy, was unable to attend.
The report of the subcommittee will be published in the *11th World Health Organization Technical Report*

Other Problems

It was decided that the section of the hospital record relating to identifying data should be recorded by medical record or registration officers and should include as a minimum name type and location of the hospital the patient's name national identity number (if any) hospital registration number race sex date of birth date of admission and of discharge and referral service (physician other hospital etc)

The subcommittee also emphasized that provision should be made in the compilation of hospital statistics for counting the number of patients admissions and discharges and principal diagnoses of various kinds. It recognized the necessity for uniform definitions of the following terms: hospital hospital bed inpatient outpatient admission discharge patient day duration of stay etc but these definitions could not be thoroughly studied at the first session and will probably be placed on the agenda of a subsequent meeting.

Other questions of practical importance had to be postponed or entrusted to national health administrations or national committees on health statistics. For example the subcommittee thought it desirable to prepare statistics in certain hospitals for the mentally ill. Such studies entrusted to national committees on health statistics would give information concerning the origin of disorders involving hospitalization according to the sex of patients their age civil status occupation duration of the illness family history and other measurable etiological factors. It is also desirable to compile statistics concerning the immediate result of hospitalization as far as possible these should be supplemented by studies of sample groups of population in order to determine the prevalence of mental disorders.

The subcommittee unanimously acknowledged that in general the *Manual of the International Statistical Classification of Diseases Injuries and Causes of Death* meets the requirements of hospitals better than any other classification it therefore recommended its general use for preparing statistics on hospitalized illness. In the opinion of the subcommittee it is not necessary that such statistics be prepared routinely in all countries for all hospitals it would suffice to encourage their compilation in a few countries or in certain given regions in which the population exposed to risk of disease can be defined or wherever such definition is not possible in certain hospitals.

IMPROVEMENT OF STATISTICS ON FOETAL MORTALITY

Statistics for the city of New York show that, in 1948, 67% of the foetal deaths recorded occurred before the 20th week of gestation, 12% between the 20th and 28th weeks and 18% after the 28th week (the period of gestation was not recorded for 3% of the deaths). What is the international significance of these figures? Only after comparison with similar data from other cities and States can an answer be supplied to this question. Such comparison is rendered difficult if not impossible by the varying meanings attributed to the terms stillborn and abortion. Thus, the New York statistician who considers as 'stillborn' a foetus whose death occurred after the 20th week of gestation finds that almost one third of the total number of foetal deaths comes into this category, on the other hand for the statistician of some other American State who accepts the definition suggested by the League of Nations according to which only foetal deaths after the 28th week are considered 'stillborn', the category would include only 20% of the foetal deaths recorded.

The US National Committee on Vital and Health Statistics which has recently been comparing stillbirth statistics for New York with those for other large towns in the USA was impressed by the magnitude of the foetal wastage problem as shown by the data for New York City, and that current data on stillbirths in the United States did not begin to indicate the true picture of such wastage. The committee stressed the gravity of this problem and in its report to WHO expressed the belief that even in New York City a very large number of foetal deaths was not registered.

If the 1948 New York City foetal death ratio corrected for under-reporting were applied to the US live birth data there would be approximately 500 000 foetal deaths in the United States each year. The committee believes this is a public health problem of great significance the magnitude of which is not indicated by the current reporting of only 75 000 to 80 000 stillbirths in the United States.

At present, both the registration and the classification of this demographic data leave much to be desired. Valuable information is lost for want of some universally acceptable criteria which would allow research workers in various countries to use and interpret the statistics available.

Towards a New Terminology

The World Health Organization has set up a subcommittee for the definition of stillbirth and abortion reporting to the Expert Committee on Health Statistics to formulate a new demographic terminology which might be acceptable to all Member States. The problem which faced

IMPROVEMENT OF STATISTICS ON FOETAL MORTALITY

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The data should be classified in four groups as follows (duration of gestation being measured from the beginning of the last menstruation)

- Group I — less than 20 complete weeks of gestation
- Group II — 20 complete weeks of gestation but less than 28
- Group III — 28 complete weeks of gestation or more
- Group IV — gestation period not classifiable in groups I II and III

With requisite changes of detail the same classification should be used in the preparation of tables on foetal deaths. Groups I II and III may be described respectively as early intermediate and late foetal deaths. The terms abortion and stillbirth should be retained only if essential for use within a nation and stillbirth only in so far as it corresponds to Group III (late foetal deaths). The subcommittee did not attempt to define abortion.

It is hoped that statistical tables covering all foetal deaths will be published in the near future. Countries unable to publish such tables immediately should at least register data and prepare tables covering all foetal deaths occurring after the 28th week of gestation.

Advantages of the New Definitions

These proposals open up new perspectives to all those concerned with vital statistics. The new definitions which the subcommittee proposed depart considerably from that adopted by the Health Organization of the League of Nations. The 1925 definition relied essentially on observing pulmonary respiration in the foetus. A number of States found this unacceptable. Clinicians declared that they felt neither morally nor ethically justified in considering the foetus dead if any sign of life had been observed such as movement of voluntary muscles beating of the heart or pulsation of the umbilical cord. In adopting the new definitions the subcommittee interpreted the feeling of a majority which holds it essential that signs of life other than respiration be taken into account. Some physicians might perhaps be rather unwilling to draw up a birth and a death certificate in cases in which it is difficult to ascertain whether the foetus is born alive. Experience shows that this happens quite frequently even today consequently a large number of such cases are not registered. It is for this reason that the subcommittee was unanimous in stressing the importance of doing everything possible to secure the co-operation of physicians and all other persons responsible for the registration of births. It further recommended that only a "foetal death certificate" and not both a birth and a death certificate be required for such cases. It is as yet too early to draw up a standard form for such a certificate even though uniformity is needed.

Taking all these factors into consideration the subcommittee thought it preferable to formulate new definitions rather than to encourage acceptance of those attempted by the Health Organization of the League of Nations

New Definitions

First to be studied was the term 'live birth', which is interpreted differently in different countries. Since the French language has no equivalent for the term 'live birth' the subcommittee prepared a definition which could apply equally to 'live birth' and 'live born'.

Live birth is the complete expulsion or extracting from its mother of a product of conception irrespective of the duration of pregnancy which after such separation breathes or shows any other evidence of life such as beating of the heart pulsation of the umbilical cord or definite movement of voluntary muscles whether or not the umbilical cord has been cut or the placenta is attached each product of such a birth is considered live born.

Foetal death was defined as follows:

Foetal death is death prior to the complete expulsion or extraction from its mother of a product of conception irrespective of the duration of pregnancy the death is indicated by the fact that after such separation the foetus does not breathe or show any other evidence of life such as beating of the heart pulsation of the umbilical cord or definite movement of voluntary muscles.

These definitions were adopted by the Expert Committee on Health Statistics which met in Geneva in April 1950. The Third World Health Assembly has now to approve them before WHO Member States actually adopt them.

When the recommendations of the Subcommittee on the Definition of Stillbirth and Abortion have been universally accepted each country will in the future be called upon to prepare statistical tables of 'live births' and 'foetal deaths' for comparable periods of gestation. The subcommittee set these periods after studying the current data on foetal deaths and live births in various countries. It noted that very rarely are infants reported as being 'live born' prior to the 20th week of gestation. On the other hand, there are recorded in England approximately three times as many live births as there are foetal deaths after the 28th week of gestation. It would therefore appear that a foetus begins to have a fair chance of survival at about this period. The subcommittee consequently decided that dividing lines at the 20th and 28th weeks could reasonably be used in the preparation of vital statistics since clinical conditions affecting live birth and foetal death change appreciably at about these times.

On recommendation of the subcommittee all countries are to submit tables of statistics covering all births whatever the duration of gestation.

of being based on the assumption that the exact weight at birth will be known—information which cannot always be obtained. For this reason and for the promotion of international uniformity the expert group recommended the use by all countries of the definition which was adopted by the First World Health Assembly and which is set forth in the *Manual of the International Statistical Classification of Diseases Injuries and Causes of Death* ²

For the purpose of this classification an immature infant is a liveborn infant with a birth weight of 5½ pounds (2 500 grams) or less or specified as immature. In some countries however this criterion will not be applicable. If weight is not specified a liveborn infant with a period of gestation of less than 37 weeks or specified as "pre-mature" may be considered as the equivalent of an immature infant for purposes of this classification.

The problem of prematurity should be approached in two ways: first by planning to reduce the incidence of premature birth and secondly by providing special care for premature infants. Preventive measures since they are a part of prenatal care may precede the development of special programmes for care of the infant.

Preventive Programme

Certain conditions are prerequisites for the carrying out of a preventive programme. These conditions include a well organized public health service with a section actively concerned with maternal and child health; definite indications that the infant mortality rate is declining; and provision of facilities for hospitalization of pregnant women, particularly those with complications. In many instances the cause of premature birth is not known and studies of this problem are indicated. There are certain factors that are known to affect the incidence of premature births: for example, early and continuous prenatal care; maintenance during pregnancy of good physical and mental health; services such as prenatal clinics providing medical, nursing, public health and social services; hospitalization for women with complications; well-organized obstetric services; legislation for protection of mothers, etc. are preventive factors the importance of which should be stressed by an educational programme.

Care of Premature Infants

In carrying out a programme of special care for premature infants there are also certain prerequisites. The entry on the birth certificate of the birth weight and the length of the gestation period (or at least one of these particulars) should be made compulsory. Exact statistics of foetal

The new definitions made no radical change with regard to classification according to the period of gestation. The terms 'stillbirth' and 'abortion' will no longer be used in international tables but in practice, as has been seen, individual countries may still continue to use them in their national statistics. The new terminology is undoubtedly more flexible and at the same time, better adapted to the requirements of the various countries. It will enable States with highly organized services to draw up detailed tables, at the same time less advanced countries will at least be able to register and classify their basic data. The figures will be comparable and as a result, clinical and, more especially, etiological knowledge will, in all probability, benefit considerably. It is hoped that in the light of this knowledge, it will be possible to take more effective public health measures to reduce the number of lives lost among premature infants.¹

¹ Another WHO expert group has recently studied the measures to be taken in this field (see below).

PROBLEM OF PREMATURE INFANTS

WHO has given particular attention to the problem of prematurity, an important cause of infant mortality. A group of experts which met in Geneva from 17 to 21 April 1950 emphasized the necessity for organizing and encouraging appropriate action with regard to prematurity and for collecting data on the various aspects of the problem.¹

Neonatal Mortality-Rate

The expert group stressed the importance of reducing the neonatal mortality rate by giving special care to all infants weighing $5\frac{1}{2}$ pounds (2,500 g) or less regardless of the length of the gestation period. A definition established solely on birth weight however has the disadvantage

¹ The following were present at this meeting:

Members

- Dr L. Camacho, Chief, Maternal and Child Health Centre, Public Health Department, Quito, Ecuador
- Dr V. Mary Crosse, Paediatrician, Birmingham Regional Hospital Board, Birmingham, United Kingdom
- Professeur M. Lelong, Clinique de Pédiatrie de la Faculté de Médecine de l'Université de Paris, France
- Dr S. Z. Levine, Professor of Paediatrics and Paediatrician-in-Chief, New York Hospital, Cornell Medical Center, New York City, N.Y., USA (Chairman)
- Miss E. Magnussen, Director, Nursing Division, National Health Service of Denmark, Copenhagen, Denmark
- Dr A. Ylppö, Professor of Paediatrics, University of Helsinki, Chief, Children's Clinic, Helsinki, Finland (Co-Chairman)

Adviser

- Miss D. Batt, Matron, Training Centre for Plunket Nurses, Dunedin, New Zealand

Secretaries

- Dr Ethel C. Dunham, Consultant, Maternal and Child Health Section, WHO

The report of the group will be published in the *World Health Organization Technical Reports Series*.

In some regions a programme of education of physicians nurses and midwives in the care of premature infants must be instituted while in others existing programmes may need to be expanded Educational programmes should include particularly practical experience in a well equipped hospital In addition there should be instruction in and demonstration of techniques of care and later refresher courses

Research programmes suggested were studies to correlate the gestation period with birth weight and other criteria of prematurity nutrition of pregnant women and its relation to prematurity causes of premature birth and the relation of social and economic factors to the problem Governments could give valuable assistance by granting scholarships for such research as well as for a study of the highly specialized subject of prematurity and related topics

FIRST RESULTS OF MASS VACCINATION WITH BCG

The object of the campaign for mass vaccination with BCG begun in 1948 by the Danish Red Cross the Swedish Red Cross and the Norwegian Relief for Europe with material aid from the United Nations International Children's Emergency Fund (UNICEF) and technical help from WHO—known as the Joint Enterprise—is to test over 30 000 000 children and young adults with tuberculin and to vaccinate with BCG all non reactors ¹

This vast operation is at present being carried out in 17 countries It provides a unique opportunity for beginning the study of several problems relating to tuberculosis on the basis of a sufficiently large number of observations to enable the results to be analysed statistically Various questions relating to the epidemiology of tuberculosis—for example variation in tuberculin sensitivity according to districts climate race age and sex—vaccination and its effects and the efficacy of tuberculin tests may now be investigated practically with the aid of data obtained in widely different parts of the world To examine and analyse this important collection of data a Tuberculosis Research Office was set up by WHO in Copenhagen ² The individual cards of tested and vaccinated individuals are sent to this office after being subjected to a preliminary analysis locally in certain cases Since the beginning of the campaign information has been received from various countries particularly from European countries This abundant information has provided Dr H J Ustvedt Deputy Director of the

and neonatal mortality must be available. It is essential that qualified medical and nursing services should be provided as well as hospital services and facilities suitable for the care of premature infants.

The carrying out of a programme of care of premature infants will differ according to whether confinements in a given region are in hospital or at home. The group suggested that either one or both of these programmes might be instituted as a demonstration, including the integration of all existing resources of the community into the programme. If a hospital centre for the care of premature infants is established at least one paediatrician and nurse specially trained in the care necessary for such infants must

FIG 2 EXPERT GROUP ON PREMATUREITY



Left to right (seated round table) Dr L. Verhoestraete (WHO), Miss E. Magnussen, Dr V. Mary Crose, Miss D. Batt, Dr Elinor Downs (WHO), Dr A. Yipjö (Co Chairman), Dr S. Z. Levine (Chairman), Dr Ethel Dunham (WHO), Miss H. Martikainen (WHO), Dr L. Camacho, Professeur M. Lelong.

be in attendance. The instruction of the mother in premature infant care should be started while she is in the hospital and continued in the home.

Where nursing care is given to the infant at home provision must be made for hospitalization in case the infant's condition calls for special care.

Provision should be made for transportation of the infant and for follow up medical care.

Development of Programmes Education Research

Whether care be given in the home or in hospital these initial programmes will be progressively extended to increasingly larger areas wherever possible. To achieve this an administrative organization will be required to develop and carry out the programme.

define in particular the criteria for a positive reaction which are recognized by the Joint Enterprise. Moderately sensitive test methods which exclude tuberculous persons from vaccination and as far as possible satisfy the two conditions mentioned above are to be used.

The tuberculin test may be carried out in various ways the principal methods being

(a) application of tuberculin ointment under plaster (Moro patch test)

(b) intracutaneous tuberculin injection (Mantoux test) with doses varying from 1 TU to 100 TU (1 TU = 0.01 mg)

(c) Pirquet cutaneous test with addition of adrenalin to the tuberculin (AP test)

Instructions given by the Joint Enterprise to doctors and nursing staff provide for the application of the Moro patch test to children up to 12 years of age. The comparison of this test with the Mantoux test with 1 TU or 10 TU was carried out on more than 24 000 individuals mainly in Poland examined by the Joint Enterprise and the results showed that the sensitivity of the patch test seems to correspond fairly closely to that of Mantoux 1 TU. 95% of the individuals reacted to both tests. On the other hand the patch test is sometimes less sensitive than Mantoux 10 TU in the same age group. It becomes less effective than Mantoux 1 TU or 10 TU as the age of the children increases particularly after the age of 12 (see fig. 3). The possibility of non specific reactions being elicited by the Mantoux test must be considered in the case of the children in question however such reactions are of no great importance.

The application of the Mantoux test to children over 12 years raises subsidiary questions. What dose of tuberculin should be employed—1 TU 3 TU 5 TU 10 TU or 100 TU? This is a complex question because as has been pointed out tuberculin sensitivity varies in different districts and all the factors affecting the reaction cannot be taken into account.

It was decided that in the Joint Enterprise campaign two successive tests should be made: a dose of 1 TU was used for the first test and if this was negative a dose of 10 TU was used for the second. Other combinations such as 3 TU and 33 TU 5 TU and 50 TU are still being investigated.

What are the criteria for a positive reaction? Here again opinions differ. The extent after a certain time interval of the induration caused by the injection has been selected as a criterion and a reaction which after 72 hours shows an induration of 3 mm to 4 mm or more is said to be positive.

The AP test has not yet been generally used in the Joint Enterprise campaigns but elsewhere the results of tests on 23 000 children have shown

Joint Enterprise, with material for three important articles which appeared recently in the *Bulletin of the World Health Organization*³ These articles constitute the first contribution of the Joint Enterprise to the study of three problems (a) technique of tuberculin testing, (b) local reaction in BCG vaccination, and (c) tuberculous disease in BCG vaccinated individuals⁴

As Dr Ustvedt points out mass vaccination campaigns hardly lend themselves to strict scientific investigation The time available is short, the training of the medical and nursing staff responsible for carrying out the tests and reading the reactions varies the material inoculated is not always homogeneous children often fail to appear for re examination, and information concerning the previous morbidity records of the children is difficult to ascertain In addition to these difficulties, there are biological factors, such as the different tuberculin sensitivity in different areas to consider, apart from individual variations which cannot always be taken into account In view of these two groups of variable factors it is difficult to regard the present results as absolute However, it is now possible to lay down various valuable practical rules to define a number of problems requiring more thorough experimental investigation, to refute some of the arguments, scientific or sentimental and perhaps to overcome certain prejudices

Tuberculin Testing

Pre vaccination test

The pre vaccination test with tuberculin is intended to select for vaccination individuals who are not yet infected with tubercle bacilli and to exclude from vaccination allergic individuals in whom reinfection might have unpleasant consequences There is at present however, no method by which the infected can be distinguished with certainty from the non infected With each method it is possible that positive reactions will occur in non infected individuals (non specific reactions) or on the other hand that negative reactions will be observed in individuals who, in point of fact, are infected It is necessary therefore to study various methods of tuberculin testing and to choose that method which will disclose the highest proportion of infected persons, who should not be vaccinated and the highest proportion of non infected persons who should be vaccinated The criteria for a positive reaction should be chosen so as to satisfy this dual requirement and it can be readily understood that these criteria have been discussed at great length

Instructions have been drawn up by the Joint Enterprise for the guidance of the personnel responsible for the various operations These instructions

³ *B H World Hlth O g* 1950 2 355 441 469

⁴ These articles together with a study on BCG culture (see page 187 of this number of the *Chronicle*) form a complete issue of the *Bulletin*

merely one of the aspects of allergy it may decline or disappear while the allergy of other organs still remains

A specific tuberculin reaction appearing after BCG vaccination in a non reactor to the same test shortly before vaccination shows that the latter has taken. The connexion between this fact and the increased resistance of the individual is however not known. The results of about 30 000 post vaccination reactions examined by the Joint Enterprise have been obtained from Czechoslovakia Greece Poland and Yugoslavia. Most of the studies showed a very high proportion of positive reactions—in most cases the percentage exceeded 90 / and in some cases 99 % 100 % reactors were disclosed. These results are therefore entirely satisfactory from the practical point of view although lower figures (70 %) have been recorded in certain groups. It should be noted that post vaccination tests should be carried out by the same methods as the pre vaccination tests

Local Reaction in BCG Vaccination

In healthy individuals vaccination with BCG produces a local reaction at the site of inoculation which appears after a period of three to four weeks or longer i.e. at about the same time as the first signs of allergy can be detected. Enlarged glands in the corresponding area may also be observed. This normal BCGitis is often scarcely noticeable to the individual. Nevertheless the reaction to vaccination has not always this benign character. Strong local reactions may occur. These appear in the form of an induration of 10 mm or more accompanied in certain cases by ulceration pustules and glandular complications. The intensity of the reaction depends among other things on the number of bacilli (killed or living) which have been injected on the vaccination technique and on individual factors. Observations made by the Joint Enterprise revealed among 14 000 persons examined 6 to 10 weeks after vaccination 3 / reactions measuring 10 mm or more. Ulcers appear relatively earlier i.e. between the 4th and 8th weeks in some groups ulcers were observed in 0.23 % of the individuals. Local abscesses are mentioned in some studies. Cases of glandular complications with suppuration are of the greatest practical importance. As many as 196 cases out of 62 200 individuals (0.31 %) have been observed in certain countries the left axilla was affected in most of the cases.

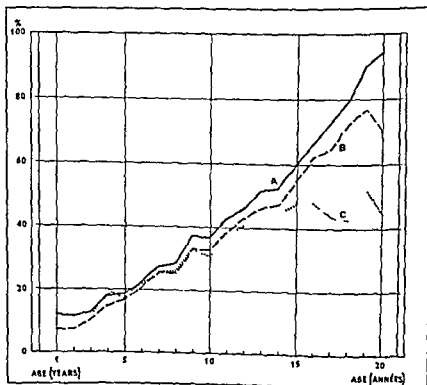
If suppurating lymphadenitis abscess formation at the site of vaccination and local ulcers with diameters of 10 mm or more are regarded as complications the proportion of these phenomena observed in the Joint Enterprise campaigns is between 0.1 / and 0.5 %.

A special case of strong reaction is the "Koch phenomenon" or accelerated formation of the tuberculous nodule (see fig. 4). It occurs much

that it is as effective as Mantoux 10 TU and seems to produce few if non specific reactions. Mass vaccination on the basis of a single negative AP test would appear to be justified, and its general employment should be considered.

The use of diluted BCG vaccine instead of tuberculin for the pre vaccination test had been advocated in order to simplify the technical procedure by working with one test and one reagent. In this connexion however further studies are required.

FIG 3 PERCENTAGE OF REACTORS TO TUBERCULIN ACCORDING TO AGE



Studies carried out on 12 448 males in Myslenice and Wadowice powiats Poland from May to June 1949

— Mantoux 1 TU and 10 TU
 - - - Mantoux 1 TU
 . . . Moro patch test

Post vaccination test (control of vaccinated individuals)

The object of the post vaccination test is to furnish information regarding the degree of tuberculin sensitivity conferred by vaccination such sensitivity being regarded as an index of immunity. This criterion is certainly not absolute but cutaneous hypersensitivity to tuberculo protein is the only criterion for the assessment of allergy which is itself the only index of immunity obtainable for human beings. Cutaneous hypersensitivity is

Owing to the imperfections of tuberculin tests and despite all the precautions adopted it is impossible during vaccination campaigns involving millions of individuals entirely to avoid vaccinating persons infected with tubercle bacilli. The lowered tuberculin sensitivity of individuals suffering from various other diseases may result in individuals who are really infected being recorded as non infected. For this reason and also owing to certain individual sensitivity factors Koch phenomena are liable to occur during mass vaccinations. The difficulty of defining the Koch phenomena exactly is one of the reasons why the statistical results on this subject are not very accurate. Nevertheless it would appear from the various investigations that strongly marked Koch phenomena likely to prove disagreeable for vaccinated individuals are of extremely rare occurrence. Only 7 cases of ulceration were noted in a district where the percentage of tuberculin reactors is very low. The studies carried out show that strong local reactions during the first week after vaccination seem to have occurred only very rarely in individuals who were vaccinated after giving a negative reaction to a patch test Mantoux 10 TU and 50 TU and an AP test. This may be taken as an indirect proof of the fact that the technique adopted for the tuberculin testing was fairly satisfactory as far as selection of individuals for vaccination was concerned.

Tuberculous Disease in BCG-Vaccinated Individuals

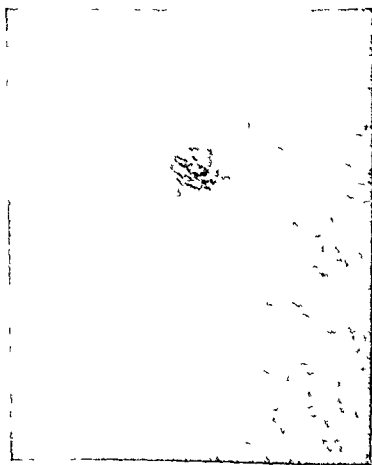
Can BCG produce activate or aggravate a tuberculous infection? The question has not been definitely settled. The problem has too often been approached on non scientific lines and should be re investigated with complete impartiality.

BCG has often been accused of causing tuberculous infection reviving latent infection or accelerating the crisis in active tuberculosis. Before discussing the question itself Dr Ustvedt points out some of the misconceptions on the part of the public and the misunderstandings which are liable to occur during mass vaccination campaigns. For example a tuberculin test may be mistaken for a BCG vaccination. Vaccination against smallpox or diphtheria may be confused with BCG vaccination. A non tuberculous disease or normal BCGitis may be diagnosed as tuberculosis etc. It is certainly easy to rectify statements resulting from such mistakes and to dispose of unfounded judgements. That being done some cases in which BCG might have played a part in the development of a tuberculous infection should be objectively examined.

Cases of tuberculosis have occurred in individuals vaccinated with BCG. The immunity conferred by the vaccine is admittedly not absolute. Can BCG however be held responsible for the infection? Thorough investigation has shown that since 1930 BCG has not caused progressive

earlier than a normal reaction and appears in the form of erythema pustul, and, sometimes ulcers or necroses, and may be complicated by glandular reactions. It is the result of a reinfection and appears in individuals who before vaccination, were already infected with tubercle bacilli. This phenomenon which was described by Koch in his experiments on animals,

FIG 4 KOCH PHENOMENON



Photograph submitted by Dr E Graubner Pilsen Czechoslovakia

has been observed particularly during experiments on the treatment of tuberculosis with BCG and in isolated cases after BCG vaccination.

A curious case appears in the literature on the subject.

A girl was vaccinated with BCG on a negative Mantoux 100 TU. The post vaccination test carried out three months later was positive. Three months after this last test she fell and injured her elbow. The lesion was accidentally contaminated by sputum containing tubercle bacilli of the human type. The girl soon showed a tuberculous ulcer and caseous lymphadenitis became apparent in the regional glands on the 27th day after inoculation.

In the last part of this article Dr Ustvedt reviews the various forms of tuberculosis observed in individuals vaccinated with BCG. Tuberculous meningitis and miliary tuberculosis have been observed in 21 children during the campaigns in various countries. In most cases the date of appearance of the symptoms makes it likely that the vaccination was carried out during the pre allergic phase. There is no evidence to show that BCG vaccination contributed to the development of the disease.

In his paper the author points out that the isolation of human type bacilli from a tuberculous individual is not in itself sufficient proof that BCG was not responsible for the disease. If BCG were to become virulent it might possibly present some of the characteristics of human type bacilli especially with regard to its pathogenicity for certain experimental animals. Cases of erythema nodosum are very controversial since they can be of non tuberculous origin. Cases of primary tuberculosis have been observed in persons infected with virulent bacilli shortly before or after BCG vaccination. However when the first 6 to 8 weeks after vaccination have elapsed without any superinfection and when post vaccination allergy has been obtained the manifestations of primary tuberculosis disappear in a striking manner. This last phenomenon is characteristic and has been observed in most of the groups vaccinated with BCG.

BCG ON SAUTON'S MEDIUM

BCG is maintained at the Institut Pasteur in Paris by subculture of the strain every 15 days on Sauton potato. For the preparation of the vaccine itself it is necessary to obtain a culture which gives a thick film. For this purpose therefore BCG is grown on Sauton's liquid medium on which two passages only are carried out.

Earlier observations by Danish workers showed that the vitality of BCG was diminished when subcultured serially on Sauton's liquid medium. The cultures were less luxuriant than on potato and the allergizing power of the strain was reduced but a passage from time to time on bile potato was enough to restore the original properties of the strain.

Van Deinse and Sénechal have reconsidered this question in detail and have given their results in an article appearing in the latest number of the *Bulletin of the World Health Organization*¹. These authors studied the behaviour of BCG in a long series of subcultures on Sauton's liquid medium alone. They noticed that at the fourth passage the growth of the culture began to slow down. Instead of a film covering the surface of the medium

tuberculosis in laboratory animals that it has not been virulent in human beings, and that no fact has come to light which has caused the innocuousness of this vaccine to be questioned

Individuals who are already infected with virulent bacilli but who did not react to the tuberculin test may be vaccinated. It was stated earlier that these tests do not reveal all the infected persons. Cutaneous sensitivity may be greatly reduced in individuals who have previously suffered from tuberculosis and may decline or disappear during infectious diseases such as pertussis or measles. Moreover the person may, at the time of vaccination be in the pre allergic phase of an infection caused by virulent tubercle bacilli and may not react to the tuberculin. The vaccination of such individuals—infected but non reactors—may cause accidents and Koch phenomena which if violent are likely to influence the course of the infection.

In the Joint Enterprise campaigns various individuals have been observed in whom the following symptoms appeared 10 to 12 weeks after vaccination: erythema nodosum, hilar adenitis, primary complex, and pleurisy. It is known that erythema nodosum may be provoked by various agents (for example drugs and vaccines) and BCG may possibly have a similar effect. In a few cases of primary tuberculosis which occurred soon after vaccination, no causal relation could be established between the vaccination and the disease. To avoid controversy, however, persons who have suffered from tuberculosis should not be vaccinated, even if they have become negative to tuberculin. The same precaution should be taken when an epidemic of a childish complaint which weakens the sensitivity to tuberculin, has broken out in an area.

The influence of BCG on active tuberculosis has already been the subject of much investigation. While some doctors felt that it had a certain beneficial effect others considered that it might not always be harmless for patients suffering from active tuberculosis. When large doses of BCG are used it must obviously be expected that such persons will show a reaction similar to that produced by tuberculin. After inoculation with strong doses of BCG a focal reaction, a rise in temperature the transient aggravation of pleurisy and articular phenomena have been observed. While it cannot be said with certainty that these manifestations are a consequence of vaccination the possibility cannot be denied absolutely. Some doubtful cases in which it is not possible to determine precisely what part was played by BCG in the development of a non apparent disease which sometimes proved fatal are discussed in detail in the article by Dr Ustvedt. This author concludes by emphasizing that in spite of the abundant documentary evidence asserting the harmlessness of BCG vaccination of persons suffering from active tuberculosis should as far as possible be avoided. Improving the tuberculin tests thus making it possible to discriminate with increasing precision between infected and non infected individuals will be the surest means of attaining this end.

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dry granules were formed (see fig 5) The size of the bacilli was also smaller by a quarter or a fifth than that of bacilli maintained on potato This fact may be of considerable importance in the standardization of BCG vaccine as the same weight of culture may contain a different number of

FIG 5 EFFECT OF SAUTON'S MEDIUM ON THE BIOLOGICAL PROPERTIES OF BCG CULTURES



A
A = normal culture
B = culture after 37th passage on Sauton's medium

bacilli according to the medium used After about 20 passages on Sauton's medium the ability of the strain to produce a local reaction in the guinea pig is also reduced

The Danish authors observed that a few passages on bile potato restored the vitality of the culture. Van Deinse and Senechal showed that the presence of bile was not essential and that a single passage on potato was enough to restore the normal development of the strain. They concluded—thus confirming the observations made by Guérin 25 years ago—that Sauton's liquid medium is unsuitable for the maintenance of BCG and that its use is to be discouraged.

WORLD DISTRIBUTION OF TRACHOMA

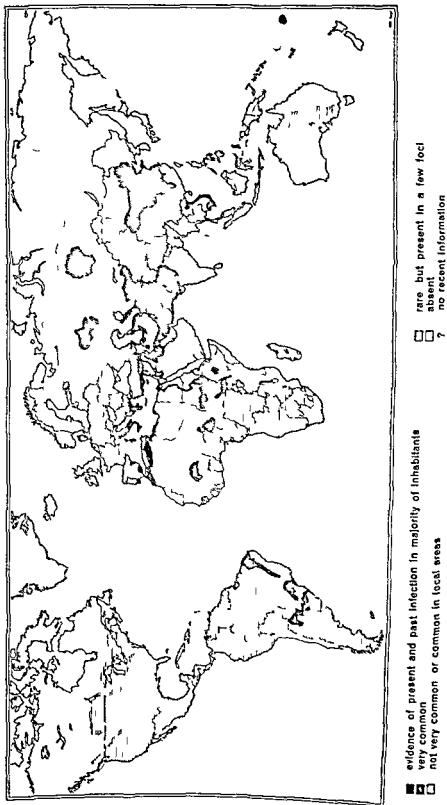
Before any action against trachoma can be undertaken it is important to study its present distribution throughout the world. Spread over almost all continents this disease is the cause of enormous economic losses. It afflicts a great number of people from childhood and is to a considerable extent chronic in nature. Its most serious consequence is blindness.

The Health Organization of the League of Nations was aware of the seriousness of the problem presented by trachoma and between 1925 and 1935 made a number of studies of the geographical distribution of the disease. Since fourteen years had elapsed since the last of these studies was carried out a joint OIHP/WHO study group which met in Paris in October 1948¹ recommended that WHO obtain from governments up-to-date information on the prevalence of trachoma throughout the world based on returns established after examination of schoolchildren, army recruits and samples of population and on the percentage of trachoma cases to the total number of eye patients treated in ophthalmic hospitals and clinics.

An article—World distribution and prevalence of trachoma in recent years—by Dr M. M. Sidky, formerly member of the WHO Epidemiological Studies Section and Dr M. J. Freyche, Chief WHO Epidemiological Information Section, was published in the November-December 1949 number of the *Epidemiological and Vital Statistics Report*². This work is based on information which WHO has received from governments. As pointed out by the authors, the results of the survey are not yet complete since there are large areas from which no documentation has been sent to WHO and since statistics with regard to chronic diseases must always be treated with caution. In spite of these imperfections, however, the conclusions reached by the authors provide some very useful data and may be used as a basis for further and more thorough research.

¹ *Off. R. W. H. A. Org.* 19: 27. *Chron. World Hlth Org.* 1948, 2, 60.
² *Epidem. I. S. I. R. p.* 1949, 2, 230.

FIG 6 APPROXIMATE GEOGRAPHICAL DISTRIBUTION OF TRACHOMA



The following points in particular should be noted

(1) The trachoma index for schoolchildren is lower than for the population as a whole. This observation is based on information furnished by several countries. In Albania for instance according to an inquiry made in 1944 the trachoma index for schoolchildren was 14 / whereas the total trachoma index was 27 %

(2) In countries where the disease is highly endemic there may be zones which are relatively free from infection. In Iran for example the trachoma indices in certain endemic areas may be from 80 % to 90 % while in other areas of the same country they may be from 2 % to 10 %

(3) An important fact which merits particular attention is that regions which were until the last few years considered to be practically free from trachoma appear from recent surveys to be highly infected by the disease. In Tanganyika for example of a group of 4 000 recruits who were examined 23 % were found to be infected with trachoma and in the higher regions in the south west of the country of 3 177 adults and children examined 54 % were suffering from the disease

(4) On the other hand in countries where trachoma previously existed sanitary measures and the raising of the standard of hygiene among the people have led to the gradual disappearance of the disease. For example only a few sporadic cases are found in Belgium Denmark Luxemburg the Netherlands Switzerland and the United Kingdom. An analogous situation is noticed in other countries in spite of chance outbreaks caused by the bringing in of infectious elements from the outside. This is the case in Austria France and the US Zone of occupied Germany. Recent statistics show however that the gradual decrease in trachoma is continuing and the results obtained from measures systematically applied in countries still affected such as Ireland and the USA indicate that trachoma will gradually disappear

Notes and News

Anaesthesiology Training Centre Established by WHO

Twenty-one WHO Fellows coming from Austria Denmark Finland Iceland Norway Sweden and Yugoslavia have arrived at the recently established anaesthesiology centre at Copenhagen to learn new techniques in this medical speciality. The centre which opened 3 May 1950 has been established in collaboration with the Faculty of Medicine of the University of Copenhagen to assure training for anaesthesiologists of which Europe has great need at the present time.

Graduate physicians will take a one year course. The training centre will benefit from the experience of two eminent specialists Dr S. G. Cullen of the University of

Iowa and Dr Ralph Waters former Professor of Surgery and Anaesthesiology of the University of Wisconsin. A British specialist Dr Phyllis Edwards and several Danish physicians will assist in the teaching.

Serodiagnosis of kala azar

A simple method for the serodiagnosis of kala-azar has recently been tested by WHO specialists. The antimalaria demonstration team in East Pakistan has undertaken a campaign against kala azar in addition to its regular activities.¹ It has been noted during the operations that serological reactions to formalin and to antimony give entirely satisfactory results when they are performed by means of capillary tubes. The practical advantage of this method is obvious: the taking of the blood samples is infinitely easier than by venipuncture.

Filariasis in Ceylon

At the beginning of March Dr M. O. P. Iyengar conducted a filariasis-control programme in the Galle Municipality, Ceylon. A previous survey of this region had revealed a high endemicity rate of filariasis due to *Wuchereria bancrofti* transmitted by *Culex fatigans*. The programme included treatment of breeding places with larvicides and training of personnel in control measures. It was decided to treat the breeding places weekly to examine them two days after treatment, and if necessary to repeat the treatment. Attention was also given to the eradication of other sources of pollution such as certain plants, defects in septic tanks and inadequate drainage systems.

BCG in Egypt

Dr D. R. Thomson, Regional Adviser for Tuberculosis, WHO Regional Office for the Eastern Mediterranean, has had several discussions with officials of the Ministry of Public Health of Egypt with a view to establishing an antituberculosis centre in that country. He has also conferred with Dr J. H. Holm, Director, Tuberculosis Division, Statens Seruminstitut, Copenhagen, and with the Egyptian authorities concerning BCG vaccination in Egypt. It has been decided to vaccinate the total population of certain provinces concentrating all the available teams there. A BCG production centre will be set up at the Fouad Serum Institute at Agouza.

Malaria

India

Investigation on the incidence of malaria has been proceeding in the Terai region in India.² Of 775 children examined in 28 villages, 548 were found with enlarged spleen. Of 187 blood smears examined from children under two years of age, 49% were positive for malarial parasites.

High incidence of malaria was also observed in similar studies in the Jeypore Hills area. It was noted that there is a general tendency for the parasite index in the villages sprayed with insecticide to be lower than that in the unsprayed villages.

¹ Chron. World Hlth Org. 1960, 4, 153.

² Chron. World Hlth Org. 1949, 3, 131.

Pakistan

Following disinsection campaigns in Iswarganj Thana Pakistan the malaria control demonstration team² was able to compute in February 1950 that the parasite index among children under ten years of age was 6.2/ in the sprayed area whereas in the untreated comparison area it was 16.3/. The difference was especially marked in the age group under two years in which the parasite index was 7.1/ in the sprayed zone and 37.5/ in the unsprayed area.

Public Health in Lebanon

Dr J. M. Vine, adviser in public health administration, visited Lebanon at the request of the Minister of Health of that country. With Dr F. W. Clements, Chief, WHO Nutrition Section, he had an opportunity to examine about one thousand children in the Palestine Arab refugee camps.

The possibilities of establishing a school of hygiene in Lebanon were considered. This school would train public health officers, sanitary inspectors, and visiting nurses.

Yaws Control in Indonesia

Dr K. R. Hill, Professor of Pathology at the University College of the West Indies, Jamaica, has left Geneva for the Republic of Indonesia, where he will direct a yaws control campaign which is being undertaken jointly by UNICEF and WHO.

From 1943 to 1945 Dr Hill took part in a campaign in West Africa for the control of yaws by the use of penicillin. He directed a team carrying out medical research on the Gold Coast on tropical diseases including yaws and syphilis.

In Indonesia Dr Hill will act as adviser on modern methods of yaws control as the medical officer in charge of a team which also includes a senior bacteriologist and a public health nurse. Dr T. B. Turner, of the Research Laboratory, Johns Hopkins University, Baltimore, Md. — which is a WHO reference laboratory — will assist in the campaign from the USA. Strains from yaws and syphilis infections will be sent to him from Indonesia from comparative investigations of treponema strains from various parts of the world.

Czechoslovakia Decides to Withdraw from WHO

Mr V. Široký, Vice President of the Council of Ministers and Minister for Foreign Affairs of Czechoslovakia, has given notice of the decision of his government to withdraw from WHO. His letter, addressed to the Director-General and dated 14 April 1950, states: "In the opinion of the Government of Czechoslovakia the World Health Organization does not fulfil the aims and principles of its Constitution. The fundamental provisions of the Constitution of the World Health Organization have remained nothing but abstract watchwords. Moreover, the Organization is subject to political influences leading even to discrimination against certain States Members, including Czechoslovakia. Developments within the World Health Organization are thus in contradiction with the principles of the Constitution, which were the preliminary condition for Czechoslovak participation."

Czechoslovakia, since 1947, received assistance which included WHO participation in various national campaigns against tuberculosis and venereal diseases. A penicillin plant, donated by UNRRA, is now functioning satisfactorily due in part to technical assistance given by WHO. Sixty-two fellowships have been granted to physicians from

the Czechoslovak health administration to enable them to study in other countries including the USSR in 1950 \$37 000 were allotted for the same purpose

WHO assistance has also taken other forms among which may be mentioned in particular the establishment of a State medical library and documentation centre at Prague WHO has already equipped a laboratory for microphotography and has presented a considerable number of medical textbooks and monographs and subscriptions to 161 medical journals In addition an anaesthesiology training-centre was being organized at Prague with WHO aid international courses in modern techniques of anaesthesiology were to be given there Finally WHO planned to furnish all the medical and surgical equipment for a teaching centre devoted to congenital heart diseases Arrangements had already been made for a group of Swedish specialists to go to Czechoslovakia in June to demonstrate new operative methods

Government of Republic of China in Formosa Withdraws from WHO

A cable dated 5 May 1950 informed Dr Brock Chisholm WHO Director General that China was withdrawing from the Organization as of 7 May and would not be represented in any organs of WHO including the Third Health Assembly The Chinese Government wished it to be known however that it would continue to adhere to the purposes and principles of WHO and to co operate to the fullest possible extent in health matters with the Organization as a whole and with its Member States

The communication came from Taipeh Formosa and was signed by George K. C. Yeh Minister of Foreign Affairs Republic of China

Cambodia and Laos Request Membership

Cambodia and Laos have on the 3 and 7 April respectively submitted applications for membership to the World Health Organization These applications were examined by the Third Health Assembly which admitted these States to membership

Seventy Member States of WHO

Nicaragua and Cuba have recently ratified the Constitution of WHO thus bringing the total number of Member States of the Organization to 70 Names of countries which are now members of WHO may be found in *Chron World Hlth Org* 1949 3 298 and 1950 4 32

CORRIGENDUM

1950 Vol 4 No 3 page 83

In the article entitled *Prevalence of plague in recent years* the Azores were listed among the areas in Africa in which plague is prevalent

The Department of Health Ministry of the Interior Lisbon Portugal has asked us to publish a corrigendum explaining that the Azores archipelago constitutes a part of continental Portuguese territory in Europe



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

CONTENTS

This double number of the Chronicle is devoted to an account of the Third World Health Assembly which was held in Geneva from 8 to 27 May 1950. The official proceedings of the Third Health Assembly comprising decisions and resolutions verbatim records of the plenary meetings and minutes and reports of the main committees will be published shortly as Official Records of the World Health Organization No 28.

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THIRD WORLD HEALTH ASSEMBLY

GENERAL ACCOUNT

The Third World Health Assembly, in a three week session, approved a programme for WHO which will give new emphasis to certain communicable diseases such as plague cholera and influenza while continuing to assign high priority to malaria tuberculosis and venereal infections. Important decisions on organizational problems were also reached by this Assembly which was in session from 8 to 27 May 1950 and was attended by delegates and observers from 63 countries and territories¹.

Rajkumari Amrit Kaur Minister of Health of India who represented her country at the First and Second Assemblies was unanimously elected President of the Third Health Assembly Dr H P Froes (Brazil) Professor G A Canaperia (Italy) and Lt Col M Jafar (Pakistan) were elected vice presidents.

The working machinery of the Assembly consisted of two committees the Committee on Programme which had Dr J A Hojer (Sweden) as its chairman and Dr J Allwood Paredes (El Salvador) and Dr S Daengsvang (Thailand) as vice chairmen and the Committee on Administration Finance and Legal Matters for which Dr J H Holm (Denmark) served as chairman and Dr J N Togba (Liberia) as vice chairman. Preliminary discussions were carried on in meetings of these committees and the decisions reached were subsequently submitted to the Assembly in plenary session for approval.

Mr Trygve Lie Secretary General of the United Nations stopped in Geneva en route from Paris to Moscow so that he might address the opening session of the Assembly and lay the cornerstone of the new wing of the Palais des Nations which will house permanent WHO Headquarters. The keynote of Mr Lie's speech at the Assembly was the need for increased effort to improve the living conditions of the more than sixteen hundred million people—living for the most part in the so-called underdeveloped areas of the world—who suffer from poverty hunger and insecurity. He gave hope to the Assembly that the Expanded Programme of Technical Assistance for Economic Development of Underdeveloped Countries might soon materialize and would make available funds for activities in which WHO might play a major role. Mr Lie praised the record of accomplishment of WHO but warned that this is the year of decision for the United Nations and its specialized agencies.

Dr K. Evang outgoing President of the Assembly repeated the concern he expressed at the Second Assembly about the inadequacy of the budget of WHO which he said "threatened to reduce WHO to an administrative

¹ For list of delegates and observers see p. 250.

planning, and collecting organization only ' He emphasized that the problem of today is not first and foremost lack of knowledge but lack of practical application of this knowledge in the field of health If half or one third, or even one tenth of the present scientific knowledge of medicine had been spelt out in terms of public health administrations hospitals, sick insurance schemes, doctors, nurses, and auxiliary personnel in a proper production and distribution of drugs and insecticides, medical literature and equipment the picture of the whole world would have been very different indeed from that which meets the eye today ' The dilemma facing WHO is that of securing sufficient funds to help governments to apply modern medical knowledge where it is needed

BUDGET AND PROGRAMME FOR 1951

Throughout the session of the Assembly there was an awareness of the difficulties of trying to economize as much as possible without sacrificing the purposes for which the Organization was created In her concluding address the President too stressed this problem, stating ' We who are assembled here know quite well how to contend against disease and ill health but the tragedy for us is that we have not, in adequate measure the sinews of war wherewith to battle against the enemies of humanity She expressed confidence that the Executive Board, whose responsibility it is to adjust the expenditures of the Organization to its ' meagre assets ', would do so in such a way that the programme activities would suffer as little as possible

The budget voted by the Health Assembly for 1951 amounts to \$7 300 000 Member States will be assessed in an amount of \$7,089 025 according to a scale similar to that adopted by the United Nations Several States have recently joined WHO thus adding to the financial resources of the Organization on the other hand the States which no longer consider themselves Members of the Organization² have created a new problem in that although they continue to be assessed and serviced the Organization cannot count on their contributions This anomalous position has resulted from the fact that since there is no provision in the Constitution of WHO for withdrawal of Member States the Assembly was not in a position to draw up a budget based solely on contributions from other Members without thereby giving legal sanction to the withdrawals Such sanction was considered inadvisable because the prevailing feeling was that nothing should be done which might contribute to depriving these States of the benefits of full participation in WHO or the Organization of their support The Third Health Assembly passed a resolution declaring that WHO will always welcome resumption by these States of full co operation in the Organization



FIG. 1. M. Trygve Lie, Secretary General of the United Nations, addressing the opening meeting of the Third Health Assembly. Centre: Dr. K. Evang, President of the Second Health Assembly. Left: Dr. B. Ch. Sholin, Director General of WHO.

The budgetary implication of this decision is that the expenditure level of the Organization will have to be readjusted so as not to exceed the actual funds available. This responsibility was entrusted to the Executive Board which met shortly after the Assembly session to re-discuss the whole programme for 1951³. The programme as adopted by the Assembly and briefly outlined in the following pages represents therefore only an attempt to draw up a general framework of activities and to guide the Executive Board in its decisions concerning the concrete programme for 1951.

The programme and budget as approved by the Assembly and amended by the Executive Board will represent the minimum activities which the Organization can expect to carry out during 1951. This does not mean, however, that entirely new projects may not be added or the present programme considerably expanded. If the Expanded Programme of Technical Assistance for Economic Development of Underdeveloped Countries, commonly known as the Technical Assistance Programme, materializes during the coming year, new funds will become available and the Organization will be expected to play an outstanding role in concerted activities which aim at the economic development of various countries.

³ A.A.O. 15th Session, 15th Exec. Board, 11th April 1951, 15th Session, 15th April 1951.

TECHNICAL ASSISTANCE PROGRAMME

The Assembly heard a statement on the latest developments with regard to the Technical Assistance Programme a subject which the chairman of the Committee on Programme qualified as perhaps the most important on the agenda. In June 1949 the Second Health Assembly approved a programme of expanded technical assistance to governments which was merely an enlargement of the regular programme of the Organization and considered an adequate means of encouraging economic development through the improvement of health conditions. It was not possible at that time to establish a budgetary procedure for the implementation of the programme, and this question was referred to the Executive Board which authorized the Director General to undertake appropriate negotiations concerning the provision and administration of funds. Meanwhile a comprehensive plan was elaborated by the United Nations and its specialized agencies WHO playing an active part in its formulation. The section of this plan dealing with health consisted in the main of an amended version of the expanded programme of technical assistance approved by the Second Health Assembly.

The plan was submitted to the Economic and Social Council in July 1949, which proposed a procedure to be followed by the United Nations and its specialized agencies for its implementation. These proposals were approved by the General Assembly of the United Nations on 16 November 1949 following which a Technical Assistance Board (TAB) was set up, consisting of executive heads or their representatives of the United Nations and of the specialized agencies. The execution of the Technical Assistance Programme was entrusted to the TAB which is working under the chairmanship of the Secretary General of the United Nations or his representative. The TAB is responsible to the Technical Assistance Committee an intergovernmental body consisting of members of the Economic and Social Council and authorized to meet when the Council is not in session. The functions of the TAB are to co-ordinate the activities of the various organizations to exchange information on requests for services and on services rendered to plan joint programmes and to report to the Technical Assistance Committee. In addition it is responsible for ensuring the minimum of overlapping with the large number of other organizations, governmental and non governmental not connected with the United Nations which are engaged in similar activities.

A preliminary meeting of the TAB was held on 15-16 December 1949, and regular meetings on 23-24 February and 20-21 April 1950. Agreements were reached on standard financial and administrative procedures and standard agreements with the participating governments as well as on a mechanism by which any specialized agency can have a programme discussed

in the TAB Only important programmes implying joint planning and action by two or more specialized agencies are fully discussed by the Board the carrying out of programmes which do not involve co operation being after approval by the Board the responsibility of the relevant specialized agency

A Technical Assistance Conference was convened in June at Lake Success This conference had the responsibility of ascertaining the total amount of contributions available from participating governments for the execution of the Technical Assistance Programme during the first year of its operations It was also entrusted with giving final consent to the proportionate shares of the total amount of contributions to be allotted to the various participating organizations A proposal already approved by the General Assembly of the United Nations assigned 22 % of the first \$10 000 000 made available for this programme and 22% of 70 / of the second \$10 000 000 to WHO

The Third World Health Assembly authorized the Director General to participate in the various bodies responsible for the implementation of the Technical Assistance Programme and to carry out health programmes as soon as funds become available subject to policies established by the Assembly and Executive Board The Director General has also been authorized to undertake technical assistance in countries which are not Member States of WHO A programme for an additional period of participation will be prepared by the Director General and submitted to the Fourth Health Assembly



FIG 2 Rajkumari Amrit Kaur President of the Third Health Assembly

CONTINUING NEEDS OF CHILDREN

Another policy decision with direct implications on the future programme of the Organization was related to the 'continuing needs of children'. The status of the United Nations International Children's Emergency Fund (UNICEF) a temporary body which was originally established to meet the relief needs of children in devastated and other needy regions is now under consideration. The emergency conditions which led to the establishment of UNICEF have now at least partly disappeared but the need for continued and co-ordinated action by the United Nations and its specialized agencies on behalf of children, whether with regard to health, education or social well-being is universally recognized. Short-term projects can however no longer be considered adequate; they will have to be replaced by long-term projects and decisions on the appropriate machinery for planning and carrying out such projects will have to be taken by the Economic and Social Council and the United Nations General Assembly.

Specifically, the point at issue is to decide whether the best way of assisting children is to establish a new permanent specialized agency responsible for all aspects of international action on behalf of children or whether to entrust such activities to the existing specialized agencies—WHO in health, FAO in provision of food, UNESCO in education—another special body being responsible for raising funds and providing supplies for use in furthering the programmes of the various specialized agencies.

Opinion with regard to this matter is divided and this was apparent also in the discussion which took place at the Health Assembly. Several delegates expressed their countries' deep appreciation of the contributions of UNICEF to child health and thought that nothing should be done which might jeopardize the continuation of its work. Other delegates argued that there could be no question about discontinuing the activities of UNICEF but merely of establishing more appropriate machinery. In their opinion it was a fallacy to consider the needs of children separately from those of the rest of the community. The excellent activities of UNICEF were not questioned but it was pointed out that special agencies qualified to deal with the various problems—health, food supply and education—were already in existence and the establishment of a new specialized agency responsible for only one section of the population would be liable to produce overlapping of activities and responsibilities and to create difficulties. Dr K. Eving (Norway) pointed out that as a member of the Joint Committee on Health Policy, UNICEF/WHO, he had experienced such difficulties. This committee had been placed in the difficult situation of either endorsing decisions because negotiations had already been started or because the emergency was very great or, by delaying assistance of laying itself open to the accusation of being unwilling to co-operate. Such

a situation could not continue. It was unimportant in his opinion which agency suffered in the long run: what did matter was that children would suffer.

The Director General also believed that the time had come when the problem of difficulties in technical collaboration between UNICEF and WHO at first thought to be of a temporary nature must be solved. If the resolution of the United Nations Social Commission recommending that UNICEF should be continued were accepted by the General Assembly UNICEF would be far more than a supply agency and would in fact be entrusted with the serious responsibility of applying plans in the field thus acting in effect as another health agency. He further explained that another organ of the United Nations, the Administrative Committee on Coordination, which is composed of the executive heads of the United Nations and the specialized agencies, had been asked to study the question and had found it impossible to agree entirely with the recommendation of the Social Commission. While recognizing the importance of UNICEF's continuing to exist as a fund-raising organization, the Administrative Committee on Coordination had been of the opinion that the utilization of funds should be entrusted to existing specialized agencies.

After a full debate on this matter in the Committee on Programme, the Assembly adopted a resolution affirming that WHO considers that in the future development of international programmes for children the principle should be adopted of utilizing to the maximum the services of the appropriate permanent specialized agencies and that any special machinery required by the United Nations should be limited to what is necessary for fund-raising for co-ordination of programme planning and to the extent agreed upon by the agencies concerned for the procurement and shipment of supplies.

FINANCIAL PROBLEMS

More perhaps than the First and Second Health Assemblies, the Third stressed the importance of exploring all possible means of increasing the resources of the Organization. The Assembly suggested to Member States that after consultation with and under the guidance of the Executive Board they adopt a suitable scheme for the issue of special world health stamps or labels for purchase by the public on a purely voluntary basis during such period or periods as Members might consider convenient. The monies raised by this means would be divided on an agreed basis between WHO and the country concerned. A further suggestion was that Member States might raise funds by the sale of flags on World Health Day. Both of these ideas were referred to the Executive Board for consideration so that a suitable plan might be developed and transmitted to governments.

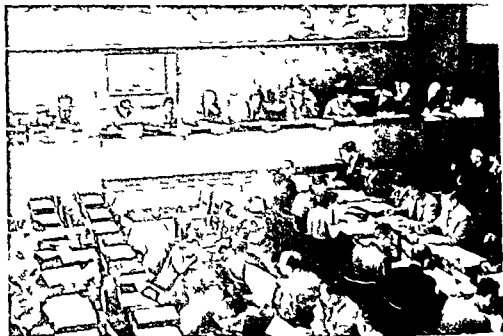


FIG 3 Committee on Administration Finance and Legal Matters in session

The suggestion made by the Belgian delegation at the Second World Health Assembly that a World Health Defence Fund be established was referred to the Executive Board for further study and the Board was instructed to defer this matter if it deemed it advisable to the Fourth Assembly.

Last year the Second Health Assembly approved a reduction of the USA contribution to the 1950 budget from 39.9% to 36% of the total assessment. This year the Assembly decided on a further reduction from 36% to 35%. This decision resulted from a resolution at the Second Assembly that the contribution of no single Member State should be greater than one third of the total budget of WHO. According to this same resolution the contribution of the USA would have to be reduced to the new level gradually over a period of several years. In the course of the discussion concerning this matter in the Committee on Administration Finance and Legal Matters Dr W Judd Congressman from Minnesota and adviser to the US delegation stated that this decision showed the genuine desire of the majority of the Members to reduce the contribution of the USA to the WHO budget to one third of the total as soon as the situation permits. He added that this gesture would in his view have considerable influence on the attitude of the US Congress not only to technical assistance but also to the Bill now before Congress to raise the ceiling of the American contribution to WHO from \$1 900 000 to \$3 000 000.

CONSTITUTIONAL PROBLEMS

For the first time a Health Assembly was faced with proposals for the amendment of the Constitution of WHO. One such proposal was submitted by the Governments of Denmark, Norway and Sweden. Its object was to replace for reasons of economy of both time and money the annual general conference (Assembly) by a biennial general conference. The Assembly requested the Director General to study carefully the arrangements necessary for implementing the proposal made by the Scandinavian Governments if finally adopted and to submit to the Fourth Health Assembly a report on the amendments and transitional arrangements which would be required. According to the Constitution an amendment does not come into force until it has been accepted and ratified by two thirds of the Member States.

The Government of Australia proposed that Article 55 of the Constitution be amended so that the Executive Board should be specifically empowered to submit to the Health Assembly with the programme and budget prepared by the Director General its own comments and such amendments as it deemed advisable to recommend to the Assembly. Although Article 55 does not specifically state that the Board is entitled to present its own comments and amendments to the budget the general



FIG. 4. Committee of Administration, Finance and Legal Matters. Left to right: Dr. J. M. al (Lebanon), Dr. S. Hayek (Lebanon), Prof. G. A. C. naperi (Italy), Dr. J. O. n (Israel).

feeling was that this is implicit in the context of the Article and that therefore an amendment to this effect which would require the slow ratification process, was not necessary. Nevertheless, to avoid any possible ambiguity on this point the Assembly adopted a resolution stating that the Executive Board may, at its discretion, recommend amendments when submitting the Director General's programme and budget estimates to the Assembly.

Another proposal by the Government of Australia was that the nature of the Executive Board should be altered. Under the Constitution, 18 States are elected by the Assembly to designate 18 persons "technically qualified in the field of health" to serve as members of the Board for a period of three years. In accordance with the provisions of Article 24 of the Constitution the Executive Board as it is now composed exercises on behalf of the whole Health Assembly the powers delegated to it by that body. The Government of Australia proposed that the Executive Board should be composed of the representatives of 18 States instead of 18 individual experts acting in their technical capacity. This proposal was inspired among other factors by the belief that recommendations are most likely to be accepted and implemented by the Member States if the governments themselves through their representatives have had a voice in shaping them at all decisive stages. A lengthy discussion on this proposal took place both in the Committee on Administration, Finance and Legal Matters and in plenary session. The Director General stated that he believed that this was much the most important matter facing this Assembly, or that has faced any Assembly of the World Health Organization up to this time. The final decision of the Assembly was that, since the Executive Board as now constituted represents the World Health Assembly as a whole, it is in the best interests of the Organization to maintain the present status of the Board.

ORGANIZATIONAL PROBLEMS

Membership

The Assembly admitted four new States to membership: the Kingdoms of Cambodia and Laos, the United States of Indonesia, and the State of Viet Nam. Southern Rhodesia was admitted as an Associate Member of WHO. The United States of Indonesia was assigned to the South East Asia Region. The State of Viet Nam and the Kingdoms of Cambodia and Laos requested that they be temporarily assigned to the same Region and in the course of the Third Health Assembly, asked for the setting up in conjunction with the delegation of the Republic of the Philippines of the Regional Organization of the Western Pacific.

Regionalization

The Assembly noted with satisfaction the substantial progress made in the decentralization of WHO's activities. Three regional organizations—for South East Asia, for the Eastern Mediterranean, and for the Americas—are now well established. A step further was made in decentralization by the approval of the Assembly of the establishment as soon as possible of an organization for the Western Pacific Region. It was not possible to take a similar decision with regard to the African Region, as a provisional measure the Assembly approved the establishment of a supervisory office at Headquarters.

Membership of Executive Board

An important discussion took place with regard to membership of the Executive Board. According to the Constitution six Members entitled to designate a person to serve on the Executive Board are nominated each year. Chile, El Salvador, France, Italy, Pakistan, and Thailand were elected this year and have designated a person who will serve on the Board for three years. Membership of the Executive Board also involved a difficult legal problem this time. The suggestion was made that the person designated by the Byelorussian SSR to serve as a member should be replaced in view of the fact that although duly notified he had not attended the second, third, fourth, or fifth sessions of the Board. Although as previously mentioned the WHO Constitution makes no provision for withdrawal, the Assembly decided that the member of the Board designated by the Byelorussian SSR should be replaced. Article 24 of the Constitution provides that the Board shall consist of 18 persons designated by as many Members. Continuing absence of one or more members of the Board was considered to hamper it in the exercise of its functions. The Assembly elected Brazil to designate a member of the Executive Board to serve for a period of one year until the mandate of the Byelorussian member expires.

National WHO Committees

Another question brought to the attention of this Assembly was the appointment of national WHO committees. Such a committee has already been established in Finland and has proved of value. The suggestion was made that national WHO committees might serve as liaison agents between the respective countries and WHO in much the same way as national UNESCO committees function. The general feeling was that while WHO national committees could carry out a number of essential supporting and advisory functions for the benefit of the Organization as well as for national

administrations the initiative in setting up such committees should be taken by individual countries rather than by WHO. This decision also applies to the establishment of similar national WHO/FAO committees which would be concerned principally with problems in nutrition. The question was referred to the Executive Board for further study.

Office International d'Hygiène Publique

The Assembly noted the measures decided upon by the Office International d'Hygiène Publique (OIHP) for the termination *de facto* of its activities in particular those relating to the termination of the lease of the premises of that body and the dismissal of its staff. It accepted with gratitude the transfer to take place on 15 November 1950 of the library and archives of the OIHP to which nationals of all countries will have unhindered access and of the sums to be derived from the liquidation of its assets as well as the sums due to it—these to be devoted to epidemiological work to be carried out in accordance with the WHO programme. The Assembly paid tribute to the remarkable work carried out by the Office International d'Hygiène Publique during the forty three years of its existence work which was rendered possible by close international co-operation in the sphere of health and by the ability, wisdom, and devotion of men of good will who took part in that work.

OTHER MATTERS

With regard to the programme of the Organization two decisions of principle are particularly worthy of mention. The first of these concerns the pestilential diseases: the Assembly, considering the international importance of these diseases—plague, cholera, typhus, yellow fever, and smallpox—and the statutory obligations of the Organization with regard to them, instructed the Executive Board to give high priority to them in planning future activities and to place suitable activities directed toward their control in the regular budget. The second decision is the approval of a long term general programme of work covering a specific period 1952 to 1955 which is to serve as a framework for annual programmes. This establishes the following criteria for the selection of activities to be included in the programme of work: international feasibility and acceptability, universal nature of the problem, possibility of assessing progress and results, financial feasibility, availability of qualified personnel, traditional international services, and co-operative services (with the United Nations, its specialized agencies, and other organizations). After detailed

discussion of the general principles set forth in the long term programme the Assembly approved it but requested the Executive Board to examine it in the light of the discussion and to present a more detailed programme to the Fourth Assembly

In accordance with another decision of the Assembly WHO will play an increasingly important part in the BCG vaccination programmes which have already been started by the Joint Enterprise The Scandinavian Co-ordination Committee which has played an outstanding role in these campaigns has decided to terminate its responsibilities in the BCG vaccination projects WHO has notified UNICEF that it is willing to undertake all technical functions necessary to assist governments in carrying out these projects jointly with UNICEF in the light of the experience accumulated in the campaigns already completed and of the recommendations of the Expert Committees on Tuberculosis and on Biological Standardization The Director General was authorized subject to any relevant decisions taken by the Executive Board to negotiate an agreement with UNICEF for the integration of the BCG vaccination programme now administered by the Joint Enterprise with the relevant WHO services and to accept funds for the implementation of such a joint service

The Assembly expressed its thanks to the League of Red Cross Societies for the Count Bernadotte Memorial Medal given to WHO for advice and assistance rendered in meeting the health needs of the Arab refugees from Palestine

The Fourth World Health Assembly will be held in Geneva

PROGRAMME

The most noteworthy change in the WHO programme as approved by the Third Health Assembly is an increased emphasis on certain communicable diseases such as leprosy, plague, cholera, and influenza. None of these diseases is new in the WHO programme but attention has formerly been given only to their epidemiological and laboratory aspects since budgetary limitations have made active promotion of control measures impossible. With a budget of \$7,501,500^a considered hardly adequate to cover even the needs of such priority subjects as malaria, tuberculosis



FIG 5. Committee on Programme. Left to right: Dr N Karabuda (Turkey), Rapporteur; Dr J Allwood Paredes (El Salvador), Vice Chairman; Sir Arcot Mudaliar (India), Executive Board representative; Dr J A Højer (Sweden), Chairman.

and venereal diseases, the Second Assembly relegated other communicable diseases to a supplemental budget, hoping that funds would later become available—probably through the United Nations Technical Assistance Programme—for implementation of the projects proposed. This hope has not yet been realized, and the Third Assembly was confronted with the alternatives of pursuing the same policy and postponing action on these diseases or of reducing expenditure on other programmes to make room for them in the regular budget. The Assembly chose to adjust the

^a *Chon World Hlth Org* 1949 3: 169

budget to include suitable activities in relation to these communicable diseases—leprosy plague cholera and influenza—in the regular programme

The absence of any lengthy discussion at the Assembly on those subjects which were qualified as "priority diseases" at the First Assembly—malaria tuberculosis and venereal infections—may be taken as an indication that these are now well established as WHO activities. Expert committees on these subjects which have met in 1949 and 1950 have laid the foundations for the Organization's projects and have supplied expert advice on various public health problems to governments. The reports of these committees were discussed by the Assembly and new meetings were authorized for 1951.

The methods of control of malaria and venereal disease which were discussed at some length at previous international meetings have been proved in the field in various parts of the world and general lines of action in regard to tuberculosis are now well established. The Assembly was satisfied with the results obtained and approved programmes which will follow the pattern drawn up by the previous assemblies. During 1951 efforts will be continued in helping governments to establish sound public health services and disease control organizations by provision by WHO of fellowships consultants demonstration teams and expert advice and information from headquarters.

STUDY AND CONTROL OF DISEASES

Malaria

The Assembly decided that the malaria-control demonstration teams now working in India (Terai Jeypore Malnad and Ernad) Pakistan and Thailand should continue their operations during 1951. The same applies to the two new teams recently established one in Afghanistan and the other in Iran.

The success of campaigns for the eradication of certain species of anophelines carried out in several areas confronts governments with the problem of preventing the reimportation of anophelines into these areas or the first time in public health history the question of adopting international regulations for this purpose can and must be seriously considered. Italy which is endeavouring to eradicate malaria-carrying anophelines fromardinia asked the First Health Assembly to study the possibility of devising adequate international regulations and to recommend measures of protection. The Expert Committees on Malaria International Epidemiology and Quarantine and Insecticides have all pointed out the necessity for obtaining information on the practicability efficiency and cost of various methods of disinsecting ships before attempting to prescribe definite international

PROGRAMME

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spends about one fifth of its health budget on leprosy alone. He felt that the heavy burden involved might be lightened if his government were able to obtain expert advice from WHO—advice such as could be provided only by an expert committee. He proposed that leprosy be made a part of the regular programme. This proposal was supported by the delegate of India who mentioned the fact that of the world's 5 000 000 leprosy victims about 1 200 000 are found in India. Delegates from Iran and Korea also expressed a desire that increased attention be given to the problem of leprosy.

Dr R. Chaussinand, observer from the International Leprosy Association, made a strong plea for action on the part of WHO. He reminded the Assembly that in many tropical areas more than 3% of the population is infected with leprosy. He stated that the urgency of an international antileprosy campaign is beyond question since leprosy is a health problem of great importance in at least 35 countries represented at the Third Health Assembly. Such a campaign is possible now that the therapeutic action of sulfones has been proved and the cost of these medicaments is no longer too serious an obstacle. Experiments in various countries have shown that diamino diphenyl sulfone, the parent substance of all the sulfone derivatives, can be used directly in the treatment of leprosy. This is of the greatest interest since the cost is much less than that of the derivatives hitherto used.

Dr Chaussinand also emphasized the urgent need for co-ordination of research on leprosy and said that WHO can render outstanding service in this direction. The need for research and the important contribution which WHO could make in this respect were likewise mentioned by the delegate of Brazil who drew attention to findings concerning lepromin. Individuals who react positively to lepromin can be regarded as free from danger of infection. According to experiments made in Brazil, 80% of the cases of negative reaction to lepromin treated with BCG or sulfones became positive. Research by WHO on BCG and sulfone treatment would be most valuable.

It is hoped that it will be possible to set up an expert committee on leprosy in 1951.

Plague

A need for new emphasis on plague control was expressed at the Third Health Assembly. The delegate of India deplored the fact that while provision had been made in the regular budget for research on plague, no definite commitments for control measures had been included. The delegate of Australia also felt that plague is essentially a disease for international action and should be given more attention by WHO. This opinion was shared by the delegates of Ireland and Brazil, the former emphasizing that one of the basic functions of WHO and one which the Organization

quarantine regulations against malaria. The Third Health Assembly decided that observation and experiments should be continued under the guidance of the Expert Committee on Insecticides until sufficient information has been obtained to serve as a basis for WHO regulations on this subject.

Venereal Diseases

It is planned that in 1951 one anti venereal-disease demonstration team will continue to operate in Europe, one in Egypt, and one in India. Consultant services and training and research activities will follow lines previously established by the First and Second Assemblies.

The International Serodiagnostic Laboratory Conference, first of its kind since 1941, will be one of the important features of the 1951 programme. This conference will bring together authors of tests from all parts of the world and will offer an opportunity for comparing the efficiency and efficacy of various methods for the serodiagnosis of syphilis.*

Tuberculosis

The Assembly decided that six demonstration teams would undertake tuberculosis field work in different parts of the world. WHO will continue to participate in BCG vaccination campaigns and will collect and analyse scientific data obtained therefrom at the Tuberculosis Research Office in Copenhagen.

The Committee on Programme heard an account of the work of the Tuberculosis Research Office from Dr C. Palmer, its director, who said that statistical reports and analyses of BCG vaccination campaigns are already under way. Records of more than 13 000 000 tests and 6 000 000 vaccinations have already been received and further reports on the campaigns in Czechoslovakia and Poland are nearing completion. Two extensive studies are being undertaken, one in Finland and the other in Denmark, to determine the effect of vaccination on tuberculosis morbidity. Detailed field and laboratory studies on the BCG vaccine itself and on a wide variety of questions regarding the tuberculin test are also in progress. The first results obtained from the Joint Enterprise vaccination campaigns have recently been made available to interested workers.⁷

Leprosy

Several delegations expressed disappointment at the past failure of WHO to take concrete action with regard to leprosy. The delegate of the Philippine Republic called attention to the fact that his government

⁷ *Chron. World Hlth Org.* 1950, 4, 150.
* *Bull. World Hlth Org.* 1950, 2, 355, 441, 469.

aware of financial difficulties and of the need to keep within a realistic budget. However since as the delegate of Ireland pointed out the Organization's obligations with regard to pestilential diseases are quite clear the Assembly decided to include cholera in the regular programme of activities for 1951.

It is proposed to send two demonstration teams into the endemic areas of Bengal, one into each of two districts in India and in Pakistan respectively. These teams, each of which will consist of three WHO members (a bacteriologist, an epidemiologist and a sanitary engineer) together with two local medical officers and the necessary auxiliary personnel will demonstrate cholera control methods and in addition will aid local health administrations in forming and training other groups to carry on control measures after WHO aid has been withdrawn. Since the problem of cholera is a complex one many different lines of attack will have to be tried by the demonstration teams. One of their tasks will be to evaluate the effectiveness of a new cholera vaccine and more than a single year's observation may be required to ascertain the duration of protection afforded by this vaccine.

Smallpox

In the discussion of smallpox emphasis was placed on vaccines. The delegate of Ireland asked that steps be taken to make the use of dried smallpox vaccine more general. He called attention to the fact that the deterioration of ordinary vaccines in hot climates and the consequent unsuccessful results could bring the whole vaccination procedure into disrepute. He proposed that WHO set up laboratories for testing vaccines for use throughout the world. The delegate of Belgium also expressed interest in the dried vaccine, commending WHO's support of the production of dried lymph vaccine in its pure state since this preparation is not only the most appropriate for use in tropical areas but also tends to limit the violence of the reaction.

The Australian delegate stressed the importance of international co-operation with regard to smallpox control. He pointed out that an effective method of controlling this disease, vaccination, has been available for more than 150 years but that the peace of mind of those countries which have succeeded in eradicating smallpox is continually threatened by fear of its introduction from some less fortunate country.

The Assembly decided to ask the Expert Committee on Biological Standardization to consider the establishment of a centre for the testing and standardization of smallpox vaccines with particular reference to dried vaccine. Higher priority will be given to smallpox in the regular programme for 1952.

is well qualified to carry out, is the elimination of pestilential diseases, and the latter reminding the Assembly that WHO has an obligation inherited from the Office International d'Hygiène Publique with regard to the five pestilential diseases. The delegate from Thailand pointed out that action is even more urgent now that the eradication of plague as a human disease seems possible.

It is hoped that, in addition to providing consultant services and fellowships and arranging for exchanges of personnel, the Organization will be able to assemble and equip an antiplague unit, of eight persons to assist and advise local personnel in campaigns against plague in Africa and in South East Asia.

The programme submitted to the Assembly included in addition a meeting in 1951 of the Expert Committee on Plague, stimulation of research in close relationship with the Haffkine Institute, Bombay, the training of plague control personnel in Africa, and publication of a manual on plague which it is believed would be extremely useful since no modern manual of this type is available. It is not certain however, whether funds will become available for all these activities.

Cholera

A pestilential disease which it was felt has not been given sufficient attention in WHO activities is cholera. A regular programme of study and field work on cholera was advocated by delegates of France, India, Pakistan and Thailand. In considering such a programme, the Assembly was fully



FIG. 6. Dr Tha Mya and Mrs Daw Khin Kyi delegates of Burma at the Third Health Assembly

The Assembly heard a report on the work of the World Influenza Centre London which has isolated ten of the virus strains responsible for the 1948/49 influenza epidemic⁹. In addition to this Centre 38 regional centres have been established. Sera and antigens for diagnostic purposes are prepared at the Statens Serum Institut Copenhagen and the World Influenza Centre supplies virus strains on request. Work in co-operation with these laboratories will be continued and expanded during the coming year. In addition fellowships for study and training at such centres will be provided.

It is hoped that an expert committee will be convened to assess results already obtained and to give direction to future research. Among the problems with which this committee will have to deal is the need for special laboratories equipped to isolate and identify influenza virus strains quickly in case of a pandemic such as that which occurred in 1918/19. The committee is also expected to study influenza vaccination problems and to prepare a large scale trial of vaccines. Despite considerable proof of efficacy under certain conditions influenza vaccination is known to have various drawbacks. Among these are relatively high toxicity possible conveyance of egg sensitivity short duration of immunity (a few months) and a high specificity of antibody response so that practically no protection against heterologous strains is afforded. It is hoped that the expert committee meeting will be able to contribute to present knowledge concerning these and other laboratory and epidemiological problems.

Poliomyelitis

On the proposal of the delegation of the Netherlands the Third Health Assembly passed a resolution urging all governments in their recording of the incidence of poliomyelitis to list separately the paralytic and the non paralytic cases. Such a distinction is important because of difficulties in diagnosing the disease while non paralytic cases are significant from an epidemiological standpoint diagnosis is often less accurate because it can be established with certainty only by the isolation of the virus in monkeys which are rarely available. Requiring separate listings of the two types of cases should make comparisons of data easier and more reliable.

The fact that the Assembly did not take further action on the subject of poliomyelitis does not mean that this disease has been relegated to an unimportant position. In the absence of accepted methods of prevention of the disease and of specific treatment the time has not yet come for international action. The Assembly agreed however that new knowledge

⁹ An article by C. H. A. drews, Director of the Centre will appear in the forthcoming number of the British Journal of the World Health Organization. See also Chron. of the World Health Org. 1942 3 17.

Rickettsioses

The Health Assembly approved plans for a joint OIHP/WHO meeting of experts to discuss the problem of rickettsioses in Asia. A similar group which met in 1950 to discuss rickettsioses in Africa reached important conclusions regarding the classification of the diseases, made suggestions for their prevention and treatment, and submitted a recommendation for the use by various diagnostic laboratories of standardized specific rickettsial strains⁸. It is expected that the work of the expert group on rickettsioses in Asia will develop along similar lines.

The Assembly gave attention also to the problem of Q fever. The Director General was requested to initiate a preliminary study on the prevalence of Q fever throughout the world and in collaboration with other specialized agencies and organizations interested in the problem to encourage investigations clarifying the epidemiology of this disease with a view to formulating effective control measures.

Yellow Fever

Although the incidence of yellow fever is small thanks to measures against *Aedes aegypti* and to widespread immunization in the 'yellow fever areas' this disease remains a serious international health problem. The delegate of Brazil emphasized the importance of preventing the transmission of the disease by *A. aegypti* from endemic and epidemic areas to receptive countries.

The delegate of France called attention to the small number of officially recognized centres for inoculation against yellow fever, which means that long journeys often have to be made in order to receive the immunizing vaccine and appropriate international certificate.

No meeting of the Yellow Fever Panel in 1951 was considered necessary provided its second meeting takes place in 1950 as was decided by the Second Health Assembly. The panel will at its next session, assess results of studies undertaken thus far and possibly modify the lines of approach to the problem of yellow fever which were originally agreed upon.

Influenza

For reasons of economy the original programme submitted to the Assembly included provision for only limited action with regard to influenza. However, discussions at the Assembly revealed a prevailing opinion that influenza had not been given sufficient attention, and it was therefore decided that this disease should have a more important place in the regular budget.

⁸ A report on this meeting will be published in a forthcoming number of the *Chorion*.

might become available in the near future and that meanwhile everything possible should be done to encourage and support research. There is hope that typing of poliomyelitis strains may advance sufficiently to justify the establishment of typing centres similar to the ones set up by WHO in influenza. The Assembly recommended the establishment in 1952 of an expert committee on poliomyelitis to co-ordinate and evaluate research activities.

Rabies

As a result of an important decision of the Third Health Assembly acting on the recommendation of the Expert Committee on Rabies¹⁰ WHO will undertake a field trial to evaluate hyperimmune serum plus vaccine as compared with vaccine alone as a preventive measure against rabies in man and a field demonstration on the control of rabies in dogs by use of a new egg adapted vaccine.

The Organization will arrange regional meetings of authorities from nearby countries where rabies is a problem so that concerted attacks on this disease will be possible. In addition WHO will co-ordinate the exchange of virus strains for the production and testing of rabies vaccines and will encourage wherever possible research on problems relative to rabies.

Trachoma

The discussion on trachoma was opened by the delegate of Italy who thought that not enough importance has been accorded to this disease. He was supported in this opinion by delegates of France, Iran and Lebanon.

The Joint OIHP/WHO Study Group on Trachoma which met in 1948 drew attention to the seriousness of the disease and recommended the establishment of a permanent expert committee to deal with problems relating to it.¹¹ Studies recently published by WHO have shown the wide geographical distribution of trachoma.¹² Modern methods of treatment particularly the results obtained with various antibiotics such as chloromycetin, penicillin and aureomycin will shortly be reported.¹³

Because of budgetary limitations the Third Health Assembly was unable to recommend concrete action on trachoma but it requested the Director General to establish as soon as the budget permits—preferably in 1951 an expert committee to study the problem of this disease and to submit proposals for control measures to the Fourth Assembly.

¹⁰ A report on the first session of the Expert Committee on Rabies will be published in the forthcoming number of the *Chronicle*.

¹¹ *Chron. World Hlth Org.* 1948, 2, 260.

¹² *Epidemiol. Stat. Rep.* 1949, 2, 230. See also *Chron. World Hlth Org.* 1950, 4, 189.

¹³ Freyche, M. J. (1950) *Bull. World Hlth Org.* 2, 523.



FIG 7 Third Health Assembly in plenary meeting

Bilharziasis

Bilharziasis was recognized at the time of the Interim Commission as a major public health problem since it is prevalent in many African American and Asiatic countries where it affects up to 90 % of the rural population¹⁴ However the Third Health Assembly believed that at this stage a concrete programme entailing provision of consultants demonstration teams equipment and promotion of training centres could be made only under the Technical Assistance Programme

The delegate of Brazil informed the Assembly that the National Department of Health of Brazil has recently created two large centres for the investigation of helminthiasis particularly bilharziasis He suggested that WHO might encourage such work in other countries

The Assembly examined the report of the Joint OIHP/WHO Study Group on Bilharziasis in Africa¹⁵ Emphasis was given to the importance of not planning any irrigation schemes in schistosoma infected regions without keeping in mind the danger that such schemes might contribute to the spread of the infection Effective measures of protection should be taken in all such cases

It is hoped that an expert committee on bilharziasis will be convened in 1951 to review the work done by the study group and to formulate a programme based on recommendations of this group and on surveys conducted in Africa and possibly America and Asia

Hydatidosis

The delegation of Uruguay drew the attention of the Health Assembly to the problem of hydatidosis which is a serious disease in certain areas of the world including parts of the Mediterranean region Oceania Asia and South America Apart from human infection this disease causes considerable economic losses in food producing animals which results in a diminution of badly needed food supplies The facts concerning this disease are well known and its eradication is feasible in most areas through co ordinated efforts to prevent the transmission of the parasite from dogs to man

The Assembly requested the Director General to lend technical assistance wherever possible upon request of government authorities for the eradication of or research on hydatidosis in co operation with other specialized agencies and organizations

Twelve Schistosomiasis (Bilharziasis) was a problem by S. A. T. Fik Shouh P. h. and Schistosomiasis in the Orient 1949 2 19 31 See also the rule by W. H. Wright, Bilharziasis public health problem in the Pacific 1949 2 581
CH H. Id Hth Org 1940 4 6

Epidemic and Serum Hepatitis

The attention of the Assembly was drawn to epidemic and serum hepatitis by the delegation of Sweden, which believed that specific measures can be taken to prevent or to reduce the incidence of the diseases and therefore proposed that an expert committee might be set up to consider this question. Such a committee would be expected to study, in particular the differential diagnosis of epidemic hepatitis and serum hepatitis, the means of preventing both diseases, the possibilities of recommending regular notification of incidence of the diseases on a national basis and the therapeutic measures available.

Delegates of France, Ireland, Italy and Switzerland supported the proposal of the Swedish delegation. The delegate of France mentioned that in his country it had been found that transfusions of blood plasma frequently caused serum hepatitis.

The Assembly, recognizing the high incidence and wide distribution of epidemic hepatitis and the serious practical problem involved by the possible conveyance of serum hepatitis by blood transfusions and parenteral application of human blood derivatives, requested the Executive Board and the Director General to make arrangements for establishing in 1951 an expert committee to consider the problems of these diseases and to make relevant recommendations.

Rheumatic Diseases

In accordance with proposals of the Danish and French delegations, rheumatic diseases will be included in the programme of the Organization during the year 1952. It was not found practical to draw up a programme for 1951.

The French delegation, in a note submitted to the Assembly, pointed out that the public health authorities in Paris, a city of 3 000 000 inhabitants, are spending more than half a million dollars on treatment for persons afflicted with rheumatic affections. An extensive survey organized in Great Britain in 1922 revealed that rheumatic diseases were responsible for one sixth of the industrial invalidity cases. Approximately 12% of the population of the USA is believed to suffer from rheumatic diseases, in Massachusetts, for example, chronic rheumatism is nine times as prevalent as tuberculosis and twelve times as prevalent as cancer. Other statistics were also quoted by the French delegation to underline the importance of these diseases.

The Assembly requested the Director General and the Executive Board to include rheumatic diseases in the programme for 1952 and to set up an expert committee which might suggest concrete proposals to be submitted to the Fifth Health Assembly.

Salmonella Infections

The Assembly had before it a proposal that the name of the International Salmonella Centre be changed to the International Salmonella and Escherichia Centre. This matter was referred to the next session of the WHO Expert Committee on Biological Standardization. The reason for this proposal was that the Centre at Copenhagen is already recognized throughout the world as an authority on the serology of the *Escherichia* group. During 1949 the Centre devoted increasing attention to the Enterobacteriaceae particularly the *Escherichia* group in addition to its work with the *Salmonella*. Impetus to studies on the *Escherichia* group has been given by investigations on the *Escherichia* etiology of epidemic gastroenteritis in infants in Denmark, the Netherlands, the United Kingdom and the USA.

A grant by the Assembly will enable the WHO Centre at Copenhagen to continue to serve as a diagnostic and typing laboratory for the various salmonellae. During 1949 2 106 test strains and 714 ampoules of test sera totalling more than 5 litres of sera were sent by the Centre to its 34 national subcentres throughout the world.

The Assembly requested the Expert Committee on International Epidemiology and Quarantine to consider the possibility of utilizing methods for facilitating the campaign against typhoid and paratyphoid B in particular by means of international collaboration for the discovery of carriers and the application of methods to prevent the infection of food.

THERAPEUTIC SUBSTANCES

Antibiotics

Discussions on antibiotics at the Assembly indicated that the non-availability of these drugs remains a serious problem in many countries. The delegate of Uruguay pointed out that the ever increasing number of such drugs further complicates the questions of production and control and of clinical application. No government he maintained can afford to ignore the important questions connected with modern antibiotic therapy and the Government of Uruguay—like many others—is anxious to establish a laboratory devoted to research in this domain. Yet there appears to be no school or university in the world where adequate instruction can be obtained for technicians required to operate such a laboratory. Moreover since there is no official organization capable of furnishing suitable plans, equipment and information for such a laboratory, the only resources available are those furnished by contracting firms.

The Assembly felt that the whole issue of antibiotics was too important to be settled by a short discussion and therefore referred the matter to the

Brucellosis

The importance of brucellosis as a public health problem was recognized by the Assembly, and it was pointed out that recent investigations have indicated that present reporting does not give a true picture of its prevalence. In the USA, for example, brucellosis is the principal human disease due to animal infection with an estimated number of 40,000 cases annually of which only some 6 000 are recorded. This high incidence occurs although more than 80% of the milk of the country is pasteurized. The disease is especially widespread among rural populations and is responsible not only for considerable physical suffering but also for prolonged incapacity which impedes agricultural production. It is a major communicable disease in most parts of Europe, particularly in the south, and certain parts of Africa, Asia, and the Americas. The wide geographical distribution of brucellosis and the economic implications of its effects make it a suitable subject for international action.

It is hoped that WHO will convene in 1950 and 1951 expert consultations of authorities on brucellosis and that the Fourth Health Assembly on the basis of the report of this group will be able to enlarge its programme for 1952.

The Third Assembly heard a progress report on the work of the regional brucellosis centres designated by WHO in 1949-1950. These centres in addition to preparing and testing standard antigens and conducting diagnostic and therapeutic research have been serving as instruction centres for laboratory workers. The work of the centres will be continued during the coming year. The WHO brucellosis programme is being carried out in close co-operation with FAO and the International Office of Epizootics.



FIG. 8. Left to right: Dr. Tran Van Bang and Dr. Dang Huu Chi, delegates of Viet Nam, at the Third Health Assembly.

Serum gonadotropin	0.25	mg
Prolactin (galactin or mammatropin)	0.1	mg
Heparin	0.0077	mg
Penicillin G	0.0006	mg
Streptomycin	—	*

Unit potency to be assigned to the representative of the Expert Committee on Biological Standardization

It was also recommended that these standards and units be introduced into national pharmacopoeias to serve as a reference for assay. In those countries which do not possess a national pharmacopoeia the potency appearing on the labels of biological products should be expressed in international units.

Drugs Liable to Produce Addiction

The principal subject of the discussion on drugs liable to produce addiction was a proposal that the use of diacetylmorphine (heroin) be prohibited. The delegate of Greece was convinced that diacetylmorphine is not essential for therapy since it can be replaced by other less toxic drugs. The use of this drug is prohibited in the USA and 24 other countries which have agreed that it is harmful, but since others still permit its use a complicated situation is created which makes the suppression of illegal traffic difficult. The Greek delegation therefore believed that it would be of great benefit if all countries would agree to outlaw diacetylmorphine.

The delegate of Turkey said that in his country careful studies have shown that diacetylmorphine is not absolutely necessary for therapy and he proposed that the Assembly take steps to suppress its use. This was in spite of the fact that such a decision would be against important economic interests of Turkey.

It was not possible to reach a unanimous decision with regard to this matter and the proposal that the use of diacetylmorphine be prohibited was defeated in the Committee on Programme by 12 votes to 8 with 9 abstentions.

The WHO programme for 1951 as approved by the Assembly includes two meetings of the Expert Committee on Drugs Liable to Produce Addiction.

Pharmacopoea Internationalis

The publication of the *Pharmacopoea Internationalis* was approved by the Third Health Assembly. Both the English and the French editions are expected to be available by the end of 1950 or early in 1951. The Assembly recommended the eventual inclusion of the provisions of the *Pharmacopoea Internationalis* in national pharmacopoeias.

Executive Board for further study. The Board has been requested to consider the desirability of asking the Expert Committee on Antibiotics¹⁶ to examine the feasibility of drawing up a concrete programme for the training of experts in research and preparation of antibiotics of setting up under the supervision of WHO a pilot plant for the production of and research in antibiotics and of collecting and making available to interested health administrations precise information on the construction and operation of an antibiotics plant including equipment and material required and personnel needed for effective operation.

International Biological Standards

The Third Health Assembly recommended that all Member States recognize officially the international standards and units listed below.

International standard preparations	International units	
Diphtheria antitoxin	0.0628	mg.
Tetanus antitoxin	0.3094	mg.
Antidysentery serum (Shiga)	0.0500	mg.
Scarlet fever antitoxin	—	•
Staphylococcus alpha antitoxin	0.5000	mg.
Antipneumococcus serum (type I)	0.0886	mg.
Antipneumococcus serum (type II)	0.0894	mg.
Gas gangrene antitoxin (perfringens)	0.2660	mg.
Gas gangrene antitoxin (vibrio septicum)	0.2377	mg.
Gas gangrene antitoxin (oedematiens)	0.2681	mg.
Gas gangrene antitoxin (histolyticus)	0.3575	mg.
Gas gangrene antitoxin (Sordelli)	0.1334	mg.
Anti A blood group serum	—	•
Anti B blood group serum	—	•
Old tuberculin	0.01	ml.
Diphtheria antitoxin for flocculation test	—	
Vitamin A acetate	0.000344	mg.
Provitamin A (β -carotene)	0.0006	mg.
Vitamin B ₁ (pure synthetic vitamin B ₁)	0.003	mg.
Vitamin B ₁₂ (pure crystalline)	—	•
Vitamin C (l ascorbic acid)	0.05	mg.
Vitamin D ₃ (crystalline)	0.000025	mg.
Vitamin E (α tocopherol acetate)	1.0	mg.
Neosphenamine	—	
Sulpharsphenamine	—	
Insulin (pure crystalline insulin)	0.0455	mg.
Pituitary (posterior lobe) powder	0.5	mg.
Digitalis	76.0	mg.
Ouabain	—	
Androsterone	0.1	mg.
Corpus luteum hormone (progesterone)	1.0	mg.
Chorionic gonadotropin	0.1	mg.

¹⁶ For report on first session of this committee see *Ch. on World Health Org.* 1940, 4, 161.

necessary. The USA is concerned about the problem because 680 000 American citizens who will be travelling abroad this year might be detained for reasons which the US Government feels have no proper medical justification and shipping and air services may be involved in regrettable delays and expense.

The Assembly recognized the need for a detailed technical and legal discussion of the draft WHO sanitary regulations to enable all Member States to express their views. Therefore a special committee will be convened about four weeks before the opening of the Fourth Health Assembly in Geneva. This committee will consist of representatives of all the Member States. Transportation expenses of delegates and advisers attending meetings of the special committee will be paid by their governments.

Emergency Measures for Mecca Pilgrimage

One of the most urgent problems before the Assembly was deciding on how emergency measures could be taken to protect the Mecca Pilgrimage in 1950 and succeeding years. The Egyptian delegation referred to the cholera epidemic of 1947 which proved that present quarantine measures are not adequate and asked for special measures of protection pointing out that an immediate decision had to be taken since the movements in connexion with the Pilgrimage were to begin in June. Memories of cholera epidemics which occurred during past Pilgrimages increased the general sense of responsibility and urgency.

The delegate from Egypt gave a brief history of protective measures taken in the past. Definite proposals to safeguard the Mecca pilgrims from cholera were submitted in April 1946 to the Office International d'Hygiène Publique by the governments of the Pan Arab League. These proposals which were in respect of the measures to be taken prior to the departure of pilgrims from their countries of origin included

- (1) bacteriological examination of the stools of pilgrims
- (2) vaccination of all pilgrims
- (3) placing under observation pilgrims from areas where cholera cases had occurred during the previous three months

In the course of the discussion of these proposals the opinion was expressed that such measures were impractical and unduly expensive. No final decision was reached and the whole question was referred to a WHO expert subcommittee which met in Alexandria in April 1947¹⁷. The majority of this subcommittee including members from France, India and the United Kingdom rejected the proposals. Five months later—the

Non proprietary Names for Drugs

The Assembly had before it for consideration a proposal that WHO should attempt to establish an international system of non proprietary names for drugs. The delegate of Portugal stated that it was unfortunate that some of the most valuable drugs should be known under different names, varying according to the country where they are sold. Any impetus that can be given by WHO to the introduction of "common" (non proprietary) names of new chemicals for medicinal use will be of greatest value.

A similar opinion was expressed by the delegate of Greece, who stated that the situation regarding proprietary names of drugs is so confusing that often doctors are quite unaware of what is in a particular preparation they give to their patients. Manufacturers should be urged to put also the common name of the drug on the label and steps should be taken to ensure that common names cannot be used as trade names.

The Assembly decided that the Expert Committee on the Unification of Pharmacopoeias should undertake the selection and approval of non proprietary names for drugs included in the *Pharmacopoea Internationalis* and that such names as are from time to time selected and approved by this committee should be communicated by the Director General to authorities concerned with national pharmacopoeias together with a recommendation that these names be officially recognized and approved and if the substances are eventually included in the national pharmacopoeia, adopted as pharmacopoeial names.

SANITARY REGULATIONS

International Sanitary Regulations

The new international sanitary regulations which are to replace the present International Sanitary Conventions are in an advanced state of preparation, and the Third Health Assembly had to take a decision on the procedure to be followed for the introduction of last minute adjustments and the preparation of the final draft which will be submitted to the Fourth Health Assembly for approval.

The delegate of the USA stressed the importance of adoption of the new regulations by the Fourth Health Assembly. He stated that the urgency of the question is increased because the Conventions at present being applied are "cracking at the seams". Certain countries are going beyond the terms of the international conventions because new problems are arising with which the old conventions are not adequate to deal. New epidemiological situations have arisen and new control methods are

necessary. The USA is concerned about the problem because 680 000 American citizens who will be travelling abroad this year might be detained for reasons which the US Government feels have no proper medical justification and shipping and air services may be involved in regrettable delays and expense.

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Egyptian delegate pointed out—cholera broke out in Egypt with more than 20,000 cases and 12 000 deaths 'tragically proving that the quarantine mechanism in force was not an adequate safeguard against cholera' The delegate made it clear that his proposal to the Third Health Assembly was not to be taken as an indication that this cholera epidemic had been related to the Pilgrimage He believed however, that if the proposals presented by the governments of the Arab League had been accepted and put into force, and passengers from India—which had presumably been the source of the infection—had been examined for carriers the epidemic in Egypt might have been avoided

This led to a discussion on the question of cholera carriers and the role they play in the dissemination of cholera, a subject debated by experts for some considerable time The delegate of Pakistan affirmed that research in endemic areas in India and Pakistan had led to the conclusion that although the cholera vibrio was to be found in the stools of convalescents or of contacts it did not remain alive beyond a period of 28 days In his opinion in the present state of knowledge there is no case to show that either convalescents or people who have been in contact with the disease can after more than a month be responsible for its transmission He pointed out that the Governments of India and Pakistan were already taking measures with regard to the Pilgrimages every pilgrim receiving before departure two anticholera injections Furthermore, the journey by sea from India and Pakistan to Jeddah requires seven to eight days, i.e. longer than the incubation period of cholera The delegate of Pakistan therefore urged the Assembly to give serious consideration to whatever decision might be reached since in view of the large numbers of pilgrims involved no government would wish to subject its people to uncomfortable and unnecessary measures for which there was no scientific backing

The delegate of Pakistan was supported by the delegate of India who reminded the Assembly that the relevant expert committee of WHO had recommended that pilgrims receive two injections of cholera vaccine the second to be administered just before arrival at Jeddah

In reply the delegate of Egypt said that so long as the possibility of transmission of the disease by means of a carrier could not be ruled out even though it might not be proven international quarantine measures were required He pointed out the conclusion of the Joint OIHP/WHO Study Group on Cholera that for purposes of international sanitary regulations, a demonstrated carrier whether a convalescent carrier or not should be submitted to the measures provided for cholera cases ¹⁸ Furthermore, it should not be forgotten that inoculation while it protects the individual is no guarantee that the person is not a carrier The fact that the sea journey requires seven to eight days is not in the opinion of the

Egyptian delegate relevant because air traffic must also be considered. The Egyptian epidemic had as a matter of fact been imported most probably from India by air. He therefore asked the Assembly to protect Egypt against infection arriving either by sea or by air and expressed his belief that although measures adopted would affect adversely the shipping and airline companies the primary consideration must be human protection and not vested interests.

Several proposals were submitted to the Assembly: one made by the delegate of Egypt that a special committee on cholera should immediately examine the situation; a second by the delegate of Lebanon that representatives of the interested countries should meet after the session of the



FIG. 9. Third Health Assembly in plenary meeting

Assembly: a third made by a special working party of the Assembly which recommended in substance that the Government of Egypt should approach directly the Governments of India, Indonesia and Pakistan with the object of concluding among themselves special agreements as to measures of protection. The last proposal was accepted with the modification suggested by the delegate of the Netherlands that Indonesia should not be included inasmuch as no epidemic had occurred in that country for the past twenty years.

The Government of Egypt is thus expected to approach the Governments of India and Pakistan stating the measures which it would be desirable for them to adopt before the beginning of the next Pilgrimage

season. It was decided that any agreement reached between these governments should be communicated to WHO.

The Assembly further considered that as the adoption by it of interim emergency regulations on the Pilgrimage would entail considerable administrative difficulties and as these regulations would, in order to become operative, require the consent of the countries concerned, there would be no advantage in following such a course in preference to the voluntary adoption by the interested countries of special national legislation.

International Certificates of Vaccination

The present form of international vaccination certificates and the requirements in connexion with their issue might be considerably simplified. The WHO Expert Committee on International Epidemiology and Quarantine has therefore recommended that

(1) the international certificate of vaccination against yellow fever be considered valid ten days after the vaccination and for six years from the date thereof,

(2) for the ordinary traveller international certificates of vaccination against cholera be valid after a single injection and for a period of six months following that injection,

(3) international certificates of vaccination against cholera and smallpox be signed by a medical practitioner whose identity is authenticated by an official stamp or whose signature is authenticated by a person legally qualified to do so.

(4) vaccination certificates against cholera or smallpox made out by a medical officer belonging to the Armed Forces or to a national or local health service require no authentication other than affixation of the official stamp of the service concerned.

Implementation of these recommendations appears somewhat difficult however in view of the fact that the vaccination certificates form part of the International Sanitary Conventions of 1944 and can be replaced or modified only by an act of equivalent legal force. This would involve a lengthy process of ratification by governments of all Member States a procedure which might not be completed before several years have elapsed. At the Assembly the delegate of the USA emphasized the urgent need for rapid simplification of the present system particularly in view of the large numbers of persons who are travelling by air. On the proposal of the United Kingdom delegation it was decided that while consideration of replacement of existing international certificates would be postponed until such a time as the new international sanitary regulations are adopted by the Fourth Assembly¹⁹ health administrations might meanwhile enter into

¹⁹ See page 226

bilateral or multilateral agreements in the adoption for their travellers of simplified forms of vaccination as recommended by the Expert Committee on International Epidemiology and Quarantine

PUBLIC HEALTH ORGANIZATION

Public Health Administration

Each of the Organization's programmes has its own importance but the work of WHO will be judged mainly by its success in helping to develop a strong national health administration in every country. No programme will be of permanent value unless there is a local health administration to carry on and to extend the work when outside help has been withdrawn. Public health administration is therefore one of the most if not the most important concerns of WHO.

It is impossible to give a comprehensive idea of all that the Assembly decided with regard to this subject since most of the Organization's activities are directly related to public health administration. Specifically the Organization will engage in 1951 in the collection of information on the newer techniques in health administration now being evolved in various parts of the world. Arrangements will be made to supply this information to all governments desiring it. Another feature of the programme is travelling seminars on public health administration for selected groups of medical officers. Under the fellowship programme medical officers from each region will attend an intensive course in public health administration for a period of from eight months to a year. Each regional office will have advisers in public health administration to assist in the development and co-ordination of health programmes. Expert consultants will also be available to advise governments on problems of public health administration and to participate in the training of medical and auxiliary personnel.

Environmental Sanitation

Perhaps more than any other WHO programme that on environmental sanitation is concerned with the training of specialized personnel. Although a high proportion of avoidable deaths are attributable to faulty environmental conditions expert personnel to deal with sanitation problems is lacking in most parts of the world. In fact the very conception of sanitary engineering is unknown in some countries.

A start in WHO's efforts to remedy this situation was made by the Third Health Assembly in its decision to assign two advisers on environmental sanitation to each of the six regions to give advice on health programmes including demonstration projects. Public health engineers and sanitarians will be attached to WHO teams to assist in developing balanced

health programmes and in training personnel for future work in demonstration and other areas. In addition, high priority has been given to the training of sanitation personnel as part of the fellowship programme.

Health Education of the Public

Delegates of Brazil, Chile, India, Israel and Lebanon stressed the great need for developing health education activities as an integral part of organized health services. The delegate of Chile urged that particular attention be given by the Organization to helping countries develop health education methods suited to the specific psychology and circumstances of their population.

Experience in various countries has shown that more effective and lasting results are obtained when health projects and services have the active support and participation of the people. Ways and means of getting public support have not been studied except in the more advanced countries, and it is felt that WHO can make a significant contribution by advising national health administrations on modern methods of health education of the public.

The Organization's programme for 1951 includes assistance to governments in establishing or improving health education programmes, advice to governments on school and community health education programmes and on preparation and production of visual materials, demonstration of health education techniques and procedures, often in conjunction with another project such as one relative to malaria, maternal and child health etc. provision of consultant services and fellowships, training courses, seminars and conferences in health education. WHO will co-operate in joint projects with other United Nations specialized agencies and with governmental and non-governmental organizations.

Nursing

Like its predecessors, the Third World Health Assembly approved programmes which depend on the direct assistance of nurses for their successful execution. During 1950 WHO has provided in co-operation with UNICEF personnel for nursing and midwifery programmes in Borneo, Brunei, Malaya and Sarawak. The Assembly approved similar projects for 1951: nurses will be sent to Afghanistan, Burma, the Philippine Republic, Thailand and other countries. Nurses who have served or are serving in field projects as members of demonstration teams have proved the efficacy of medical teamwork as well as the value of nursing services. This type of co-operative effort will be continued.

In discussing the great need for nurses the Assembly recognized the advisability of raising standards of nursing education and services and of improving the working conditions of nurses. Delegates of the USA and other countries called attention to the fact that a major cause of the scarcity of nurses is unsatisfactory working conditions such as long hours and low salaries. In many areas lack of adequate social status is also a serious problem and is one of the reasons for difficulty in recruiting candidates for training. An adviser to the United Kingdom delegation stated that lowering the standards in training does not increase the number of applicants for nursing courses on the contrary experience in her country has shown that a raising of the standards attracts more as well as better candidates. She also made a plea for better living conditions for student nurses they should be regarded as students of a profession and should enjoy the same type of living and learning conditions as those in other professions.

The WHO nursing programme as approved by the Assembly includes under the guidance of the Expert Committee on Nursing the establishment and the promotion of internationally applicable principles and techniques in nursing education and in the administration of nursing services. Assistance will be given to national health administrations in raising the standards of their nursing services both quantitatively and qualitatively to the highest possible level. The delegate of Brazil stated that even in countries where nursing education is more advanced there is still insufficient emphasis on public health. The Assembly stressed the importance of planning nursing education so that all nurses may be given an understanding of the social and preventive aspects of modern health work as well as of therapeutic techniques.

GENERAL PROMOTION OF HEALTH

Maternal and Child Health

The programme for maternal and child health as approved by the Assembly includes continuation of maternal and child health work in the field. The five maternal and child health regional advisers will continue to encourage and sponsor the development of projects. Demonstration teams will also continue to work in the various regions.

In addition the programme includes the collection evaluation and classification of information received from governments regional offices and other sources. The information will be distributed to countries regional advisers consultants and demonstration teams. The programme also includes provision of fellowships expert advice through meetings of the expert committee and expert groups and seminars and courses.

Seminars will be organized on a regional basis in order to bring together leaders in maternal and child health work particularly administrators

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FAO/WHO Expert Committee on Nutrition for further study the various aspects of the prevention and treatment of severe malnutrition particularly

(1) recommendations concerning the storage of food by governments as well as by private persons in order to diminish the risk of severe malnutrition and starvation

(2) overall measures to be taken in planning the conservation and distribution of available stocks of food so as to prevent starvation and severe malnutrition in populations suffering from severe lack of food

(3) proper treatment of patients suffering from starvation

(4) measures to be taken during relief activities to prevent the deterioration of the physical and mental state of persons in the different types of famine

(5) organization of general relief activities in relation to nutrition when famine conditions prevail and

(6) any other measures that might be deemed recommendable for the prevention of disease and death caused by severe malnutrition and starvation

Difficulties in the production of synthetic vitamins in underdeveloped countries were brought to the attention of the Health Assembly. This problem has been discussed by the Joint FAO/WHO Expert Committee on Nutrition and by the Executive Board which expressed the belief that the most satisfactory way of improving nutrition is by the provision of natural foods in such quantities and proportions that the diet is well balanced and supplies in sufficient amounts all the nutrients needed for health. The Third Health Assembly resolved however that WHO should be concerned with synthetic vitamin production to the extent of supplying whatever information or assistance may be available to any country manufacturing or contemplating the manufacture of these products.

The Assembly also studied a proposal to establish national FAO/WHO nutrition committees in all countries to serve as a link between the Organizations and the various countries with regard to nutrition problems. It was decided to leave the formation of such committees to the initiative of individual governments.

Professional and Technical Education

The emphasis given to professional and technical education at previous health assemblies and at meetings of the Executive Board has indicated that this is considered a province of particular importance for WHO. Discussions at the Third Health Assembly confirmed this viewpoint.

While the Second Assembly had to be concerned with laying down fundamental principles for a programme on professional and technical

and teachers of various countries. Discussions will be led by local or visiting consultants, who will be provided with literature and teaching equipment.

Governments should be encouraged to set up special sections within their public health administration and to co-ordinate their maternal and child health programmes with others, particularly those for nutrition and mental health.

Mental Health

The 1951 programme for mental health is based on the priorities recommended by the Expert Committee on Mental Health at its first session.^a One of the chief concerns is shortage of trained personnel, which is a more serious problem in this than in any other branch of medicine.

The Assembly approved two lines of approach for the Organization's activities in mental health:

(1) Assistance will be given to governments in the development of institutes for the training of psychiatrists, clinical psychologists, psychiatric social workers and psychiatric nurses.

(2) Public health administrations will be urged to devote their efforts not only to the development of therapeutic psychiatric services, which is a long term task, but also to preventive measures with regard to mental health, which have in the past, been largely neglected.

The Organization will also help to promote the teaching of mental hygiene to public health workers by providing assistance in setting up mental hygiene divisions in schools of public health and by aiding governments which wish to hold courses in this subject for medical officers and public health nurses.

Nutrition

In the discussions concerning WHO activities in nutrition, the Netherlands delegation drew attention to the fact that in several parts of the world, starvation has been and still is the direct cause of death of millions. The Assembly was reminded of the winter of 1944 and the following spring when 4 000 000 inhabitants of the Netherlands faced death by starvation. This was recalled to emphasize that although famine may be a special cause of sickness and death in the so-called underdeveloped areas of the world, it has occurred and can occur in the future in all parts of the world when disaster of one type or another strikes. In view of this fact, the Assembly approved a request that the Director General refer to the Joint

^a *Ch on World Hlth Org* 1950 4 3

Many delegates spoke in favour of using WHO fellowships for training abroad undergraduate medical and nursing personnel for countries which have no training facilities of their own and no means of providing them. The trainees upon their return could constitute the nuclei of local training institutes to be established later.

Assistance to educational institutions will be another important activity of WHO in 1951. This will comprise advice on the organization and programme of training, sending of lecturers and provision of medical literature and teaching equipment.

Other activities will include a meeting of experts on medical education assistance in the organization of courses, seminars and study groups and participation in various joint educational activities of the United Nations and of the other specialized agencies.

Co-ordination of International Congresses of Medical Sciences

WHO will continue to give advice and material assistance to the Permanent Council for the Co-ordination of International Congresses of Medical Sciences which was established under the auspices of UNESCO and WHO in 1949. Dr K. Soddy, member of the Executive Committee of the Council, gave an account of the work done during the past year and outlined briefly some of the future projects. The Council is expected not only to co-ordinate conferences and conference techniques but also to disseminate information resulting from conferences i.e. proceedings and scientific findings. A particularly interesting development is the promotion by the Council of advanced short seminars or courses organized in connexion with international medical congresses and of small symposia of experts. For example, a meeting of 15 experts from different countries will study the geographical distribution of diseases, cancer in particular; another group will study the biology of muscle and muscular affections.

The Council, which is financed mainly by WHO and UNESCO, is a non-governmental body with more than 40 international member organizations. Its legal seat is in Brussels and its secretariat in Paris.

HEALTH STATISTICS

The reports of the Expert Committee on Health Statistics²² and of its three subcommittees—on cancer statistics²³, hospital statistics²⁴ and the definition of stillbirth and abortion²⁵—were approved by the Third Health Assembly. The last is especially significant in that birth statistics might

²² An account of the work of these expert groups will appear in forthcoming issues of the *Chronicle*.
²³ *Ch. H. Id. H. H. O. g. 1950* 4 167

²⁴ *Chron. World H. H. O. g. 1950* 4 172

education, the Third Assembly had the report of an expert committee¹¹ to serve as the basis for discussion and was therefore able to deal with more specific problems

One of the primary considerations was the problem of distribution of doctors. Examples of various solutions were given by the delegates of different countries e.g., obligation to work in rural areas before settling down in a larger centre, support to doctors in rural areas in the form of houses dispensaries and other facilities. In some countries, such as Norway, health insurance schemes have been helpful in bringing medical care to rural districts

The delegate of Australia called attention to the anomaly that, despite the great need for doctors, there are among the displaced persons in Europe thousands of highly trained medical personnel who unable to practice their profession are working at menial occupations. He suggested that WHO might collaborate with the International Refugee Organization in an attempt to rectify this situation

Opinions were expressed concerning the nature of professional education. Several delegates stressed the desirability of developing a community outlook in doctors so that they would be interested in all the social problems of the community. The Assembly recognized the importance of the sociological and preventive components of education of health personnel and agreed to call the attention of governments to the necessity of adequate preparation along these lines, with particular emphasis on preventive and psychosomatic medicine and social pathology

The need for establishing international standards of medical education was also emphasized in view of the danger that in certain countries particularly those which are underdeveloped an effort to train large numbers of doctors might tend to lower their standard of education. The opinion was expressed that in areas where training resources are scarce and the number of doctors is small it would be preferable to put auxiliary personnel to work under the supervision of doctors rather than to attempt to train more doctors rapidly by lowering the standards of medical education

There was general agreement that fellowship grants, which are one of the chief means of implementing WHO's programme with regard to professional and technical education should under no circumstances be curtailed even if this should mean sacrifices in other budget items

The delegate of Israel had a concrete suggestion to make concerning the preparation of candidates for WHO fellowships. Each candidate should be required to submit a description of the prevailing situation in his own country in the field of his study. This would ensure his awareness of the special problems he would be called upon to face

¹¹ For report on first session of this committee see *Ch World Hlth Org* 1950 4 119

EDITORIAL AND REFERENCE SERVICES

On the proposal of the French delegation the publications programme of the Organization will be re evaluated from the standpoint of structure and frequency of the various publications. The Assembly requested that the Director General submit a special report to the Executive Board and the Fourth Assembly on the principles and measures adopted with regard to the publications programme and that the Executive Board in turn present its observations and comments on this report to the Fourth Assembly. The Executive Board was also asked to consider a proposal made by the delegate of the Netherlands that the *Bulletin of the World Health Organization* be published in a single edition containing articles either in English or in French according to the language in which they are written with summaries in both the working languages of the Organization.

The most satisfactory method of presenting information in the *International Digest of Health Legislation* was also considered by the Assembly but this problem too was referred to the Executive Board for further study and ultimate decision.

On recommendation of the Executive Board it was decided to defer for future consideration the proposal to publish an International Health Yearbook.

OTHER PROBLEMS

It is impossible to give a full account of the discussions at the Assembly and to accord every subject its proper importance. However mention at least should be made of those programmes which although they do not play a predominant role in WHO activities at present may assume greater significance in the future as more funds become available. Among these is for instance the rehabilitation of the disabled including the blind. WHO participation in international projects on this problem is limited by the priorities already established which means in effect that rehabilitation is a concern of the Organization only as part of a priority programme (e.g. maternal and child health tuberculosis). However the Assembly requested the Director General to co operate fully with the United Nations and specialized agencies and to develop proposals for WHO participation in combined programmes with these organizations for 1952. The Executive Board will follow closely any developments along this line and limited work will be undertaken in 1951 as the budget permits.

Physical training which has been under discussion since the First Health Assembly is another domain in which it was decided that little could be done during the coming year.

in the future be based on the new definitions of live birth and foetal death which were set forth by the subcommittee and which might now be adopted by Member States. This should result in a notable improvement in the comparability of such statistics.

Some delegations expressed concern that because of budgetary limitations no clearing centre has been established for the study of problems arising in connexion with the application of the new *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*²⁵ adopted by the Second Health Assembly. A special resolution was passed by the Third Assembly for the establishment as soon as possible of such a clearing centre within the Secretariat.

On the proposal of the French delegation the following questions will be referred to the Subcommittee on Hospital Statistics for further study:

- (1) the number of beds deemed necessary for each hospital service for a given population
- (2) the best methods of calculating the rate of hospitalization and the average duration of stay in each service,
- (3) the best distribution of hospital services within a community due regard being paid to the functions of each service,
- (4) a classification of hospitals according to the general functions each is called upon to perform
- (5) an order of priority for the work of hospital construction and modernization

The terms of reference of the subcommittee are thus considerably enlarged and its activities extended to the study of problems the conclusion of which would make it possible to deal on rational bases with the optimum health equipment of each region.

WHO will continue to assist national administrations in setting up or reorganizing health and vital statistics services and will also lend assistance to the national committees on health statistics whose creation was endorsed by the First Health Assembly upon recommendation of the International Conference for the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death²⁶. New committees may be established in certain countries where such activities have been previously unknown and a unit in the WHO Secretariat will act as liaison agent.

²⁵ B II World Hlth Org. Suppl. I 1948 1949
Ch. on II o Id Hlth Org 1948 2, 114

dental caries was a nutritional problem and might best be incorporated into the nutrition programme. However the delegate from the USA thought that *dental hygiene should definitely not be considered as part of this programme* inasmuch as many other aspects of the problem would have to be investigated in seeking the causes of dental caries.

The Assembly endorsed a programme on immunization against communicable diseases of childhood and decided to call a conference in 1951 of heads of laboratories and institutes producing vaccine against diphtheria and against whooping cough.

The question of whether or not WHO should act to some extent as a relief organization and send supplies for government health programmes was amply debated at the Second Health Assembly. This is one of the subjects on which opinion has always been divided. The necessity for sending medical equipment to some countries has been universally recognized but many delegations have questioned whether such an activity is really within the province of WHO. Furthermore, the limited budget of the Organization makes impossible any substantial aid of this sort. Adoption of a definitive policy is, at the present time impracticable, the only course seems to be to try to satisfy only the most urgent needs for supplies. The Assembly requested the Executive Board to discuss the question of freer and more rapid flow of supplies to governments, including the possibility of setting up a revolving fund on which governments might be able to draw and to which they would make repayment in their own currencies.

The problem of insecticides and supplying them to governments particularly held the attention of the Assembly. Member States were urged to ensure the freer flow of insecticides and their ingredients to countries where they are needed and where their domestic production is either non-existent or insufficient. The Assembly invited governments to call on WHO for information and advice concerning those phases of insecticide production which they might undertake domestically. Also important in relation to insecticides is the labelling of such products and attention was called to the recommendation of the Expert Committee on Insecticides that manufacturers be required to label insecticides properly listing the active ingredients and the amount of each present.

Efforts are now being made by several organs of the United Nations to encourage a freer exchange of needed commodities among countries with particular emphasis on the abandonment of economic barriers. The Assembly requested the Director General to draw the attention of the Economic and Social Council at its next session to the proposal that countries facilitate as much as possible the free flow into the countries where they are needed of essential diagnostic therapeutic prophylactic teaching and research equipment and supplies and raw materials and machinery for their production by measures which they deem appropriate with regard to tariffs and import and export restrictions.

Another matter to which the Assembly gave consideration was that of dental health. On the proposal of the USA delegation supported by delegates of Finland and France the Health Assembly requested the Director General to study the problem of dental health with a view to presenting a programme on this subject to the Fourth Assembly. The collaboration of all research institutes concerned with this problem was requested. In the course of the discussion the opinion was expressed that

Biographical Note

RAJKUMARI AMRIT KAUR

President of the Third World Health Assembly

Rajkumari Amrit Kaur President of the Third World Health Assembly was born in Lucknow India on 2 February 1889. She is a member of the ruling house of Kapurthala a Sikh state in the Punjab. She studied in England and France and holds the degree of Doctor of Literature from Delhi University.

The Rajkumari's life has been devoted to social welfare work. In her student days she began to be interested in welfare activities and nursing and later worked in hospitals and dispensaries throughout her country. She became active in Indian women's organizations the All India Women's Conference (AIWC) in particular. She gave evidence on behalf of this organization before Lord Lothian's Franchise Committee in 1932 and on behalf of all three of India's main women's organizations before the Joint Select Committee in London in 1933. She was president of the AIWC in 1938 and chairman of the AIW Fund Association during two periods 1937-1941 and 1946 until the present time. She has published two books on the role of women in India *To Women* and *Challenge to Women*.

She was secretary to Mahatma Gandhi for sixteen years and has been appointed one of the trustees of the Gandhi Memorial Fund.

As first woman member of the Advisory Board of Education (Government of India) the Rajkumari served from the time of its inception until August 1942. She was reappointed in 1946. She was appointed Minister for Health in the first Dominion Cabinet in 1947. In this capacity she has been instrumental in establishing the first nursing council in India and has sponsored legislation raising the wage level of nurses. She is chairman of the Indian Leprosy Association and of the Indian Red Cross Society.

Rajkumari Amrit Kaur has also been active in international organizations. She was one of India's delegates to annual UNESCO conferences in 1945 in London and in 1946 in Paris. She led India's delegation to the First and Second World Health Assemblies.



FIG 10. Raj Kaur, President Third Health signing the a J. memorating the of the laying stone for the Palais des Nations. Left: Mr M. Pe President of the Confederation Mr Trygve Lie Secretary General of the United Nations

FIG 11. At the ceremony for laying the cornerstone of the new wing of the Palais des Nations. Left to right: Mr W. Moderow Director European Office of the United Nations; Dr Brock Chisholm Director General of WHO; Rajkumari Amrit Kaur President of the Third Health Assembly; Mr Trygve Lie Secretary General of the United Nations



regard themselves as Members of WHO. This is close to 10/ of the Members of the Organization. What makes this unjustifiable and inexplicable withdrawal the more hurtful to the interests of international health is that the countries in question constitute a group of nations which we for several reasons need badly in the World Health Organization. We would like again to stress that the doors are open for them to join up again.

Secondly the Second World Health Assembly last summer voted a budget completely inadequate to meet the health needs of the world and also the programme drawn up by the Executive Board and the Secretariat. The budget which was passed threatened to reduce WHO to an administrative planning and collecting organization only leaving very little funds and strength for the blood and life of the Organization—the practical work in the field through its central and first and foremost through its regional offices. Only a precariously narrow margin of money now separates us from being a body which would be able to fulfil mainly its statutory routine functions. Extremely important as these are they would to my mind not be sufficient in the eyes of the world to justify in the long run the continued life and expansion of WHO.

Thirdly the so-called Point 4 programme of technical assistance for the economic development of underdeveloped countries has not yet materialized. We have as you know put great faith in this broad minded and generous idea and so have a great number of countries all over the world.

The vast majority of the people of the world still live in bondage to disease and misery. Science knows the means to rapid improvement and we know how to administer the proper health measures. We are not dreamers but practical men. Nevertheless a majority of the Member countries themselves voted a budget for WHO which is disastrously inadequate. Why has this situation arisen and why do we uphold it? I am not offering an explanation because I know of none which would satisfy you and me.

The Hon Rajkumari Amrit Kaur India

The technical competence of the World Health Organization to deal with maternal and child health problems as with similar problems in respect of the remaining sections of the community must receive due recognition. It must be remembered that a campaign for dealing with the health hazard of mothers and children cannot in many cases be isolated from similar work for the remaining members of a community. For instance a venereal diseases campaign for mothers and children will be bereft of much of its value if fathers and other members of the family are not also dealt with at the same time. Similarly antimalaria measures directed against mosquitos or against their larvae will benefit the whole population. A rigid isolation of effort between the two groups (mothers and children on the one hand and the rest of the community on the other) seems therefore neither practicable nor desirable.

Taking a long term view of the situation I imagine that it would be well worth considering whether a substantial portion of UNICEF funds which are earmarked specifically for the purpose of serving health needs of mothers and children should not in close co-operation with and with the technical guidance of the World Health Organization be spent on providing basic health services for children and mothers such as the provision of health centres and hospitals for infants and older children of school health services of institutional and domiciliary midwifery and above all of facilities for health education in the homes of the people. On a foundation of such provision can be engrafted the specialized services of the World Health Organization such as those dealing with venereal diseases tuberculosis leprosy etc and the specialized agencies should even in the interests of children and mothers extend their scope of activity to the remaining sections of the population.

Dr P. Gregoric Yugoslavia

I would like to point out that the World Health Organization has in the course

Points from Speeches

Mr Trygve Lie, Secretary General, United Nations

The supreme challenge of the second half of the twentieth century—and especially of the next twenty years—is not expressed in the ideological and power conflicts that monopolize the headlines today. The supreme challenge is presented by that great majority of the population of the world—over sixteen hundred million—whose poverty, hunger and insecurity must be substantially remedied if they are not to result in new and disastrous upheavals.

Most of these people live in the so-called underdeveloped areas of the world mainly in Asia and Africa. They are moving rapidly toward political equality. They will no longer accept the grinding poverty that has been their fate for centuries.

We cannot meet this challenge successfully at the snail's pace of today. We cannot meet it by halfway measures. We cannot postpone it until a more convenient time. The challenge is here, and now.

There is only one possible way of achieving so great an objective in so short a time. That is to use to their fullest capacity the universal machinery, resources and experience of the specialized agencies and the United Nations. We are not doing that today.

Our expanded programme of technical assistance for economic development is a step in the right direction. But the allocation by the Member Governments of a far greater proportion than at present of their available resources in brain power and money power will be necessary.

Dr K. I. Vang, Norway

Public health, once a stepchild among the medical specialties, has in the last decades gained a unique and very strong position indeed. More than anything else,

perhaps the experience gained during the second World War contributed towards opening the eyes of the world to the tremendous possibilities involved in modern public health activities—meaning in this connexion properly organized preventive, curative and rehabilitative medicine.

If half or one third or even one-tenth of the present scientific knowledge of medicine had been spelt out in terms of public health administrations, hospital, sick insurance schemes, doctors, nurses and auxiliary personnel in a proper production and distribution of drugs and insecticides, medical literature and equipment, the picture of the whole world would have been very different indeed from that which meets the eye today. Not only the expectancy of life would have changed, not only the possibility for millions and millions to enjoy life and happiness, but also the productive capacity of vast areas would have been changed and the standard of living would have been greatly improved. We must not forget speaking in strictly economic terms that ours is a world of rich countries, middle-class countries and poor countries. Many of the clouds that darken the international sky today have been basically produced by the frictions and tensions which must arise as long as standards of living are as different as we find them in the world. Countries with hundreds of millions of population are still as far as protection of life and health is concerned lagging a hundred years or more behind. Here is indeed fertile ground for co-ordinated international action if such action had its free run.

In 1946 the perspectives for a broad scale international health programme were very bright and still in 1948 the outlook was good. There is no reason to hide the fact that in the last year WHO has suffered several setbacks. First not less than six Member countries have so far announced that they do not any longer

Consequently it is uneconomical to use it when a piece of work can be done equally well nationally and the resources are available nationally

The provision of the necessary medical resources is often a purely economic question and not a medical one so that while admitting the need for urgent help in emergency in the long run more will be achieved by helping in the economic re-establishment of a country than can ever be achieved by doling out material. We know the truth of this in our own countries. Immediately full employment and a reasonable economic level are reached the health of the people improves accordingly. We are apt to forget that the health problems of the world in very many cases have an economic basis and in our attempts to utilize our resources for maximum results we should constantly bear this in mind.

The Hon S W R D Bandaranaike Ceylon

We must never permit ourselves to lose sight of the essentially international and world character of this Organization. We must never allow purely individual and national points of view to obscure our realization of this fundamental fact. I therefore deprecate any attempt to amend the Constitution or to take any other steps calculated unduly to stress the national point of view. This point of view—that is the national point of view—will of course always exist to some extent. That is quite understandable but I do not think it needs any special protection constitutionally or otherwise nor should it be unduly emphasized.

It is most regrettable that the withdrawal of certain Members has reduced the world character of WHO. I think it will be admitted that we have done our best to persuade these Members to continue in our family of nations. We still hope that they may change their minds and rejoin us.

Dr A C K E. Raja India

The question of medical supplies has been discussed on more than one occasion

by the Assembly and by the Executive Board. While it is recognized that WHO cannot make itself responsible for buying and selling medical supplies to governments on a large scale, the need for assistance to enable governments to secure adequate amounts of essential drugs and insecticides is so great that I feel that the question of extending help in this direction should continue to receive serious consideration. DDT, penicillin and other drugs have greatly extended the possibility of preventive care and remedial measures being made available to the people. On the other hand, exchange difficulties and the effect of devaluation of currencies have made it extremely hard for governments to secure adequate amounts of such essential medical supplies. It is therefore urged that the question of active help from WHO to governments which are finding it difficult to secure such supplies should continue to be explored. Governments should of course pay for these supplies. If such essential articles can be made available at reasonable cost and in adequate quantities, the promotion of measures by governments to safeguard the health of their peoples will be greatly facilitated.

Dr J N Togba Liberia

In view of the fact that there is as yet no regional bureau in sight for Africa, Liberia would appreciate very highly assistance from the World Health Organization in environmental sanitation, road construction, malaria control, eradication or control of yaws among children and fellowships for undergraduates.

It is regrettable to state here that we have no adequate water supply nor sewage disposal as a result of which there are diarrhoeas and intestinal parasites in abundance in spite of the fact that free clinics and treatment are given by the Government.

Liberia, being located in the tropics, experiences heavy rainfalls with a yearly average of 150 to 180 inches. For that reason it is difficult to maintain dirt roads in good condition. Therefore many areas cannot be reached for medical care.

of its two years' work greatly assisted my country as well as other countries by enabling it to send abroad large numbers of medical men for further specialization and by placing at its disposal as at the disposal of other countries professional literature which has made it possible to study the latest achievements of science and to promote health services in our respective countries. I wish also to point to the help which my country has received through UNICEF especially medical assistance. This assistance which included insecticides, penicillin and laboratory material and transportation enabled my country to achieve with considerable financial assistance from its own Government most remarkable results in the organization of malaria control and anti-venereal disease campaigns. In 1949 there were registered in Yugoslavia barely seven thousand malaria cases, most of them relapses, whereas in recent years as well as before the war we had more than one hundred thousand and even two hundred thousand malaria patients yearly.

Dr M. Khalil Bey, Egypt

Discoveries in the field of sanitation, prevention of disease and therapeutics are available, but only a small fraction of the inhabitants of the world are benefiting from them. This is due to lack of funds, lack of technical assistance, lack of medical personnel or even to ignorance as to the existence of this means of saving life, allaying human suffering and prolonging life. It is through the World Health Organization that knowledge, technical assistance, expert advice, medicaments and public health equipment can be provided for the undeveloped areas of the world.

The less developed countries of the world ought to be, and I believe are, very thankful to the more favoured countries for the help they receive through the different activities of the World Health Organization. This help is not of a material nature only; expert advice and demonstration projects are perhaps more important. The expectation of life of a child born in the undeveloped areas of the world sometimes does not exceed 37 years, while in some of

the advanced countries it is about 70 years. The World Health Organization intends to better the chances for a longer and happier life for those unfortunate children.

The countries represented here may differ in their opinion on the merits of the United Nations as an instrument to ensure peace and prevent war, but all of them are of one opinion as to the humanitarian and beneficial work done by the World Health Organization, although it is yet in its infancy.

Dr Melville Mackenzie, United Kingdom

The almost limitless scope of the international field in itself creates a danger—that of attempting to cover too much ground superficially. Desire to meet the wishes of an individual Member of the Organization or pressure to obtain results rapidly with the purpose of justifying the Organization in political or lay circles may be contributory to unsatisfactory and shallow work. In all international work political action should be the servant and not the master of health programmes. The reverse has too often been the case in the past. Progress in the science and application of medicine, the good it can bring to all peoples of the world and how much each can benefit from the experience of others, should be the only considerations of an international medical organization. In making our decisions during this Assembly we must consider how we can most efficiently allocate our financial resources, relatively very small in relation to the problems, so that we use our money to the best possible advantage of humanity as a whole. It will indeed be unfortunate if we spend our time suggesting or agreeing to pieces of work which can only reduce the effect of the activities we have already started.

In this connexion I would again like to stress the importance, at any rate at the present time, of limiting our activities to work which can only be done through international machinery or which particularly lends itself to international procedures. It is an unfortunate but unavoidable fact that international, as compared with national, machinery is unduly expensive.

future life of the individual. A young mother may be given the most valuable advice and nevertheless be torn between understanding on one side and strong habits and prejudices acquired in the past. Needless to stress how much more this is true with regard to mental health. It follows therefore that there is need for preparation for parenthood taking advantage of all our knowledge and that this preparation must start as early as possible in the childhood of the future mother—father, teacher or citizen in general. It is quite natural that we turn to the school and kindergarten to provide this education not only in conveying knowledge but in duly using all the scientifically proved methods of influence and guidance. Thus our children would be taught at school not only how to write and read but also how their bodies are built up, how to obtain better health and prevent diseases. May I be allowed to ask are not matters of mental and physical well-being as important as algebra and geography?

Dr H. P. Froes, Brazil

The Brazilian delegation wishes to draw attention to WHO's increasing activity in the field of international health assistance which is one of the most important objectives of the Organization. We are rapidly approaching the time when an epidemic of plague, yellow fever, smallpox or cholera will be a most exceptional occurrence.

The National Health Department of Brazil follows with particular interest the

activities of the group of experts who are preparing the International Sanitary Regulations and I hope that their magnificent work will constitute a great step forward in world health.

The establishment of committees for international health affairs in the various departments of health seems to us of the greatest importance for the improvement of health policy provided that such committees to ordinate their activities with those of the corresponding committees in the ministries of foreign affairs in the various countries.

Dr L. A. Scheele, United States of America

I want to remind you that the United States has been a strong supporter of this Organization. We have believed firmly in the principle that the underdeveloped countries should be assisted by those more privileged. I think you had some little evidence of some of the actions of our Congress on this score in this very week. We subscribe fully to the principle that we should openly discuss the problems that come before us with nations and people—and nations consist of people. WHO consists of nations and its people present and debate their views in open forum. Those views may be divergent but we have the open forum of discussion and we need not be vindictive about attitudes. We finally vote on our resolutions and I am sure we all—I know the United States does—willingly accept the decisions that we reach.

It is a shame to say that a country with approximately two and a half million people has 30 doctors of whom only one is a citizen of the country

Dr A H Taba, Iran

A group of villagers all of whom are physically below par and with a large proportion intermittently ill and unable to work will not show the energy and ambition necessary to better their lot. In some areas of Iran the ravages of malaria and other diseases are so serious that whole villages can be found with hardly a really healthy child under two years of age. You can see whole estates in rich valleys where the crops cannot be harvested before much of them are wasted and lost because the able-bodied villagers suffer from malarial fevers at harvest time.

By vast future health projects even the most distant farmers can be protected from many diseases which sap their strength and working capacity.

I must emphatically stress the fact that malaria although our most serious scourge is not the only serious problem with which we are faced. Tuberculosis, venereal diseases and infant mortality are amongst the other most urgent problems of our nation needing immediate attention. We have been visited by WHO consultants in tuberculosis and nursing and we are confident enough that their report on conditions in Iran will attract the attention of the responsible authorities of WHO to the vital importance of future aid in these matters.

Professor J Parisot, France

This national selfishness excluding as it does any spirit of real co-operation is one of the most serious obstacles to international action. It is as harmful to the United Nations as the selfishness of one member can be to a family or the selfishness of one class to a whole society.

It is likewise essential that every country should be prepared to give the Organization the benefit of its culture, its own special scientific or technical knowledge, its men, its institutions and its production.

In this way it will in turn be called upon to give and to receive through the intermediary of the Organization. Success depends ultimately on the way in which each of us understands his part in the common task and gives proof of his disinterestedness. We must not bring to WHO our contribution in men or in material in order to enhance our national prestige or strengthen our economy. We must not seek its aid to evade our own responsibilities. We must never lose sight of the fact that we are here to serve only the interests of the international community.

Dr J Oren, Israel

Ignorance is certainly one of mankind's worst enemies. Ignorance in matters of physical and mental health is certainly together with social factors and limitations of medical science and practice responsible for the fact that human beings are still so far from the state of complete physical, mental and social well-being.

No matter how successful national governments may be in their efforts to improve health, much will still depend on the individual on his knowledge and his understanding. The public may or may not avail itself of our knowledge in physical and mental hygiene. It may or may not support the endeavours of its health authorities. This is why our Constitution names as one of the functions of the Organization "to assist in developing an informed public opinion among all peoples on matters of health." True that health education programmes must be adjusted to the specific needs and conditions of each nation. Nevertheless there are certain facts which are of importance throughout the world. First I have in mind the fact that even today almost everywhere parenthood is perhaps the only job if I may say so which is supposed not to require any training or knowledge such as is required in any other profession. Another fact is that health education, especially mental health education, loses much of its value and effect unless started in very early childhood. In this period of life habits and attitudes towards problems of life are shaped which bear decisive importance in the

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Dr A E Rowlett Honorary President

Dr R Jaccard Official Representative in Switzerland

International Federation for Housing and Town Planning

M J Peter Conseiller municipal de la Ville de Zurich Switzerland

International Hospital Federation

Dr O Binswanger Vice Chairman Chairman Swiss Hospital Association

International League against Rheumatism

Professeur K. M. Walthard Professeur extraordinaire de Physiothérapie Hydrologie et Climatologie médicales à la Faculté de Médecine de l'Université de Genève Switzerland

International Leprosy Association

Dr R. Chaussinand Chef du Service de la Lèpre à l'Institut Pasteur Paris France

International Union against Cancer

Professeur A. Jentzer Professeur ordinaire de Clinique chirurgicale à la Faculté de Médecine de l'Université de Genève Switzerland

International Union against Venereal Disease

Dr W. Burckhardt Technical Counsellor

International Union for Child Welfare

Mrs J. M. Small Deputy Secretary General in charge of the Research Department
Miss L. Frankenstein Research Department

League of Red Cross Societies

Dr G. Alsted Director Health Bureau
Dr Z. Hantcheff Assistant Director Health Bureau
Miss Y. Hentsch Chief Nursing and Social Service Bureau (*Also observer for the International Council of Nurses*)

World Federation for Mental Health

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Dr J. R. Rees Director
Dr K. Soddy Assistant Director (*Also observer for the Council for the Co-ordination of International Congresses of Medical Sciences*)

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Mr F. Dausset Education Secretary
Dr E. Musil Director Health Committee of the Austrian United Nations Association

World Medical Association

Dr J. Maystre Liaison Officer with WHO Geneva Switzerland
Dr E. J. McCormick (*Also member of the United States Delegation*)

Views on WHO

Third World Health Assembly

The following editorials have recently appeared in the medical press on the occasion of the Third World Health Assembly

The first two annual Assemblies of the World Health Organization were held in an atmosphere of optimism. Those who attended the committee meetings were obviously keen and alert. The spirit of co-operation was in the air and there was a general sense of great expectation. At the Third General Assembly of WHO which concluded on May 27 it was not difficult to detect a sense of disappointment and frustration. This may in part have been because those who put in so much hard work in the Interim Commission and subsequently had hoped to see more done and that more quickly. But as the *British Medical Journal* of May 6 showed WHO has already achieved much and holds out great promise for the future if the future will allow its fulfilment.

Preoccupation with the budget no doubt in part accounted for the eagerness with which members followed the discussion on the fate of Unicef (United Nations International Children's Emergency Fund) which was set up at the close of the war as an *ad hoc* organization for bringing quickly aid to children in distress. It was not needed that this should be a permanent establishment and because of this and also of the strong emotional appeal of the object of the Fund its coffers were soon filled and refilled with hard currency. There is now a proposal that Unicef should be put on a permanent footing as one of the specialist agencies of the United Nations. The existing specialized agencies have met and discussed and have formulated objections to the proposal. Unicef is doing more and more work in the medical field often in collaboration with WHO. On the face of it

it would seem highly undesirable that there should be two international health organizations with overlapping activities. What surely is needed is a unification of the work. WHO needs money to carry out its essential tasks and these must of necessity relate as much to the needs of children as to the mothers and fathers of such children. It may call for some self-sacrifice on the part of those engaged on the tasks of Unicef to merge some of its work into that of WHO but such a move would be in the best interests of those whom both organizations exist to serve. Apart from anything else the multiplication of specialized agencies is surely to be deplored until the existing agencies have at least got more firmly on their feet.

Although it would save money it is much to be hoped that the proposal to hold the General Assembly every two years will not be put into effect. It is true that the holding of an Assembly each year puts a strain on the secretariat, makes heavy demands on the time of the delegates and costs money; nevertheless if the Assembly does not meet each year it will fail to have a firm grasp on policy and too much power will be put into the hands of the Executive Board. It is true that much of the business of the Assembly is of a routine nature but as in all such international gatherings those informal contacts made outside the committee rooms and Assembly chamber are of incalculable value in cementing friendships and in promoting the free flow of ideas and information.

Two main trends in the work of WHO derive from the Health Organization of the League of Nations and from Unrra. The League concentrated on such things as establishing standards and providing technical information. Unrra, lavishly equipped with dollars went in for field work. There can be seen in WHO a certain antagonism between these two methods of approach. The old League way was safe. The Unrra way was

extravagant but at least imaginative. Yet there is little point in sending an expert team on malaria to demonstrate modern methods of control, prevention and treatment if in that area there are not enough doctors, nurses and sanitary inspectors to carry on the work when the team has left, and there is too some risk in picking out this or that disease for frontal attack, because in this way the total health needs of a certain community may be lost sight of. As Princess Amrit Kaur observed in her Presidential Address to the Assembly: "More than half the people of the world live in areas where modern health services with reasonable standards of efficiency are non-existent and the work of the World Health Organization will make its impress on the world health problem only by promoting through all possible means the provision of adequate health protection to these peoples."

"Vast areas of the world are in desperate need of the services of the sanitary engineer. This is an unromantic conception, but as the history of our own country shows, the public health movement could make no headway until we provided a clean water supply and instituted efficient methods of disposing of sewage. These more prosaic things it would seem must come first, and even then W.H.O. can do little for the health of people unless they are well fed and well housed and can earn an adequate living. If the United Nations can yet become what its name implies, then through itself and its specialized agencies these goals should not be unattainable. In the meanwhile W.H.O. is doing work that should appeal to doctors and enlist their interest and support." (*British Medical Journal* 1950 1 1354)

"The World Health Organisation whose third annual assembly has just been held at Geneva has made an impressive start. One of the difficulties facing such a body is that in creating an international staff it must avoid taking too many from one country and must ensure the adequate representation of less highly developed countries. The need for members of the staff to adjust to the international atmo-

sphere and to uproot themselves from their familiar patterns of life has engendered stresses in the young organisation. Nevertheless an observer will be impressed by the spirit of enthusiasm of the staff, by the rapidity of expansion of the work, and by the evidence on all sides of friendliness and good human relations. The same friendliness and tolerance was to be seen among the delegates to the assembly, and if at times enthusiasm became damped, this might be ascribed to the enormous complication of the agenda and the long hours of work on detail. The assembly was faced with a number of unsolved political, administrative and clinical problems. The communication of ideas and meaning is never easy in committee, but the obstacles are much increased when a large proportion of the delegates have imperfect command of either of the languages in use. Many misunderstandings and unduly long discussions would not have occurred had all delegates been perfectly at home in either English or French.

An excessive itemisation of the programme, lacking in qualitative discrimination, led during the discussion of concrete subjects such as communicable diseases to a kind of arms race among the countries particularly concerned, who wanted to raise expenditure regardless of the budgetary limitations of the whole programme. Some delegates succumbed to the temptation to display special knowledge and committees patiently endured many uninvited lectures. At times the programme committee lost in discussion about individual diseases, lost sight of even health itself, at other times broad programmes of medicosocial amelioration received their justification in the somewhat unworthy terms of anticipated increase in industrial production and the like. These programme difficulties can be overcome by improved preparation and greater experience of delegates, but this is a national matter on which W.H.O. can exert only a limited influence. It may be hoped, however, that time and growing experience will provide the solution to these incidental problems and thus leave the organisation free to tackle its proper job. Its approach to its task is far seeing and broadly con-

ceived and its work is energetic and enthusiastic. There is ample good will both among staff and delegations: the organisation is itself conducive to international harmony which is more than can be said of all international agencies and there is a growing realisation that the promotion of health is a world wide concern. The absence for political reasons of certain nations is sincerely regretted and recognised as a source of weakness to W.H.O. but the opportunities for work which remain are almost unlimited and there is always the possibility that political influence in the sphere of health may abate and make cooperation possible in the future.

Recently medical readers have had the advantage of seeing a comprehensive review of W.H.O.'s work published by the *British Medical Journal* in an international health number on May 6. Generally however this work receives little publicity and the ordinary citizens of most countries know little or nothing about it. The reason is that the solid achievements of positive health work

rarely make news and that the only activities of the organisation which attract the assurance of commanding headlines in the newspapers are the repercussions of some political misfortune. Unhappily this state of ignorance breeds apathy and enables the more chauvinistic elements of the press to attack W.H.O. on the ground that good money is being poured down an international drain with no hope of adequate return. In fact however the total expenditure of W.H.O. for the year 1951 is limited to 6 300 000 United States dollars (about £2 million). Nobody would hold that the existence of an international organisation absolves member nations from their responsibility for the health of their own citizens and the bulk of expenditure on health must be a national matter. Nevertheless the progress of civilisation depends on the willingness and ability of more highly developed countries to bring aid to backward communities. All who can see beyond the boundaries of their own countries will be anxious to see it [W.H.O.] given a better chance to rise to the occasion" (*The Lancet* 1950 1 1041).

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RECENT AND FORTHCOMING MEETINGS

8-27 May	Third World Health Assembly Geneva
30-31 May	Joint Committee on Health Policy UNICEF/WHO fourth session Geneva
1-10 June	WHO Executive Board sixth session Geneva
7-12 August	WHO Expert Committee on School Health Services first session Geneva
28 August 2 September	Joint ILO/WHO Committee on Occupational Hygiene first session Geneva
4-7 September	WHO Regional Committee for the Eastern Mediterranean third session Istanbul
8-9 September	WHO Regional Conference on Statistics Istanbul
11-16 September	WHO Expert Committee on Mental Health second session Paris
11-16 September	WHO Expert Committee on Tuberculosis fifth session Geneva
22-26 September	WHO Regional Committee for South East Asia third session Kandy Ceylon
23 September 2 October	WHO Expert Committee on Venereal Infections Subcommittee on Serology and Laboratory Aspects second session Paris
25-30 September	WHO Regional Committee for the Americas second session Pan American Sanitary Organization Directing Council fourth meeting Ciudad Trujillo
4-11 October	WHO Expert Committee on Insecticides second session Geneva
9-18 October	WHO Expert Committee on International Epidemiology and Quarantine third session Geneva
30 October 4 November	WHO Expert Committee on the Unification of Pharmacopoeias seventh session Geneva
6-11 November	WHO Expert Advisory Panel on Brucellosis Washington
27 November 9 December	WHO Malaria Conference in Equatorial Africa Kampala Uganda
December	WHO Expert Committee on Public Health Administration first session Geneva
11-16 December	WHO Expert Committee on Malaria fourth session Kampala Uganda

SIXTH SESSION OF THE EXECUTIVE BOARD

The Executive Board held its sixth session in Geneva from 1 to 9 June 1950 i.e. a few days after the close of the Third World Health Assembly.¹ Dr H. S. Gear was elected Chairman and Professeur M. De Laet and Lt Col M. Jafar Vice Chairmen.

As a result of decisions taken by the Assembly the Board had several important tasks to perform. Its attention was primarily directed towards problems of a financial nature particularly with regard to the 1951 budget. Other questions also discussed were decentralization of the Organization arrangements concerning the rules of procedure and the programme of the Health Assembly relations with non governmental organizations reports of expert committees supplies for governmental programmes the technical assistance programme and publications.

In the course of its work the Board made use of the reports of the Standing Committee on Administration and Finance² whose aid was found so useful during the fifth session of the Board and of the Committee on Non Governmental Organizations. Three working parties were appointed to study questions of procedure supplies for governmental programmes and the problems involved in the choice of a different seat for each Assembly.

The Executive Board decided to open its seventh session on 22 January 1951 at the Palais des Nations Geneva. This session will be preceded by a meeting of the Standing Committee on Administration and Finance which will take place on 7 January.

Budgetary Problems

The Third World Health Assembly adopted a budget of \$7 300 000 for 1951 in accordance with the estimates submitted by the Director General and requested the Executive Board to establish the level of expenditure.

Taking into consideration that amount of the estimated income for 51 which was reasonably expected to become available during that year the Board decided that the expenditure level for 1951 should not exceed \$6 150 000. As some of the Member States including those which have decided to withdraw from WHO had not made their subscriptions available the programme of WHO had to be re-examined in the light of the principles laid down by the Third Health Assembly and had to be adjusted to the financial resources of the Organization. During the discussion stress was laid on the necessity of not decreasing the allocations for

¹ C.A. H. H. M. H. A. G. 1950 4 197

² C.A. H. H. M. H. A. G. 1950 4 130

fellowships, technical services and field operations of giving priority to pestilential diseases, and of maintaining certain expert committees. A saving should be realized by reducing the total number of staff apart from persons professionally qualified in public health.

To promote the international work of WHO it was suggested that funds might be collected, either by issuing special postage stamps or world health labels or by the sale of flags on World Health Day. The establishment of a World Health Defence Fund would make it possible to mobilize considerable resources in favour of health. The most suitable methods of raising funds will need to be studied and a programme drawn up for putting them into operation. It will be the responsibility of the Fourth World Health Assembly to take final decisions on this subject.

Decentralization of the Organization

Relations with Pan American Sanitary Bureau

WHO experts are collaborating in the work of the Pan American Sanitary Bureau which now serves as the Regional Office of WHO for the Americas, and various joint projects—a campaign against tuberculosis in El Salvador, insect control in Central America, and control of pertussis and diphtheria in Chile and Colombia—are at present under consideration. Certain problems of an administrative nature still remain to be settled with the Pan American Sanitary Bureau but the spirit of close co-operation which at present prevails augurs well for the future.

Other problems concerning regional organization

The organization of a regional office for Europe has met with certain difficulties. Six Member States in the region have so far not replied to the request sent them in connexion with the establishment of a regional organization, seven have expressed reservations and six have sent negative replies. Only eight countries stated that they were in agreement. In the opinion of the Board this question cannot be indefinitely deferred, a decision should be taken during the seventh session. In the meantime, the financial implications of the establishment of this office must be studied.

The Standing Committee on Administration and Finance studied the problem of regional organization giving special consideration to the progress made in decentralization, the organizational structure and the effectiveness of regional offices. The regional directors were able to explain the position of their respective offices with regard to these various aspects. The problems which arise are not the same for every regional organization, however, certain fundamental principles should guide the activities of the regional offices: the needs of the Member States in the region should be

studied programmes should be drawn up indicating the relative importance of each project the implementation of the projects should be entrusted to experts with an international reputation who should remain in the region long enough to familiarize themselves with local conditions. The improvement of public health services still remains one of the primary aims.

World Health Assembly

Date and seat of future Assemblies

The Fourth Health Assembly will open at the Palais des Nations Geneva on 7 May 1951. It will be preceded by a meeting of a special commission composed of Member States charged with the task of examining the draft International Sanitary Regulations prepared by the Expert Committee on International Epidemiology and Quarantine³. The need for adopting this draft is becoming urgent in view of the increasing difficulties caused in international relations by the absence of international sanitary regulations adapted to present requirements. The commission will have to meet a few weeks before the opening of the Fourth Health Assembly so that the draft regulations can be adopted by the Assembly.

Dr Hyde who was convinced of the importance of holding meetings of the Assembly away from the headquarters of the Organization—partly because of the advantages to local health administrations and partly because of the possibility of thus making the objectives of WHO more widely known—specially stressed the desirability of carefully considering this question. It stands to reason that the Organization would encounter financial and administrative difficulties. Since it would be very costly to service the assembly by transporting staff from headquarters

FIG 1 DR H. S. GEAR
CHAIRMAN OF THE EXECUTIVE BOARD



it would be necessary to recruit a large number of persons locally. This question was referred to a working party presided over by Professeur Parosot.

As regards the Fifth World Health Assembly, it was decided that consideration should be given to accepting an invitation to meet in Boston, Mass., USA. Negotiations should be undertaken now with the responsible authorities to determine what financial or other aid could be given the Organization. In future the question of the site should be studied two years in advance and all the necessary negotiations should be started in good time so that the Assembly can take the appropriate decisions.

Arrangements for the Fourth Health Assembly

Decisions regarding the Fourth Health Assembly would normally be taken during the seventh session of the Executive Board. However this question was considered so important that it was discussed at considerable length during the sixth session.

During the discussions of the Assembly, the attention of the delegates is directed to many problems which cannot be definitely settled in such a short period of time. The organization of the work of the Assembly should therefore be modified. Discussions of a technical nature should be concentrated on a small number of subjects which could thus be studied more thoroughly.

It was proposed that the training of medical and public health personnel and the economic importance of preventive medicine might be subjects of special discussion during the next Assembly. This proposal which was adopted by the Executive Board will be communicated to the Member States.

Amendments to the Rules of Procedure of the Assembly

Under the chairmanship of Mr T. Lindsay (alternate to Dr Mackenzie) a working party studied questions of procedure to be submitted for approval to the Fourth Health Assembly. These questions include a draft amendment to the Rules of Procedure of the Assembly.

The proposed changes in the Rules of Procedure are concerned in particular with the representation of the Executive Board at the Assembly either by its Chairman or by persons designated by him. It is suggested that such persons might participate without vote in the discussions in plenary meetings and in the meetings of the main committees of the Assembly if invited to do so by the President of the Assembly or by the Chairman of the main committee concerned.

An important suggestion was put forward with regard to the replacement of a person, designated by a Member State to serve on the Executive Board who fails to attend at three consecutive sessions of the Board.

In this case the Member State should be considered as having forfeited its right to designate a person to sit on the Board. The Health Assembly at a regular session would then elect another Member State to appoint a person for the remainder of the period during which the representative designated by the Member State which had forfeited its right would have been entitled to serve.

Relations with Non Governmental Organizations

The Standing Committee on Non Governmental Organizations which met under the chairmanship of Dr de Paula Souza submitted proposals to the Board with a view to extending co-operation between non governmental organizations and WHO. In general organizations admitted to official relationship with WHO should be those which might promote the application of the principles of the Constitution of WHO and which consist of international federations of affiliated national organizations. Relations with purely national non governmental organizations should take the form of merely unofficial working relations.

During the biennial revision of the list of organizations already granted official relations with WHO the Board decided to maintain such relations with the eighteen following organizations:

- Biometric Society
- Council for the Co-ordination of International Congresses of Medical Sciences
- Inter American Association of Sanitary Engineering
- International Academy of Forensic and Social Medicine
- International Association for the Prevention of Blindness
- International Committee of the Red Cross
- International Council of Nurses
- International Dental Federation
- International Hospital Federation
- International Leprosy Association
- International Union against Cancer
- International Union against Tuberculosis
- International Union against Venereal Diseases
- International Union for Child Welfare
- League of Red Cross Societies
- World Federation for Mental Health
- World Federation of United Nations Associations
- World Medical Association

In addition official relations will be established with the International Conference of Social Work. It was decided to postpone consideration of the requests of other organizations.

Expert Committees

With regard to future meetings of the expert committees in 1951, it will be necessary to keep in mind the budgetary limitations imposed by the fixing of a reduced expenditure level. The Board noted and approved the publication of the reports of the expert committees which met after its fifth session, held in January.

The working party dealing with procedural questions has drawn up draft regulations for the reorganization of the services of experts, this draft will be submitted to the Fourth World Health Assembly.

Expert Committee on Antibiotics

The Executive Board approved the publication of the report of this committee,⁴ and laid stress on the recommendation made by the Joint Committee on Health Policy, UNICEF/WHO, in connexion with the development and modernization of plants for the preparation of various antibiotics. It also recommended the continuation of research on antibiotics and the training of experts making use of the facilities which the United Nations International Children's Emergency Fund (UNICEF) and other institutions might be able to offer.

Expert Committee on the Unification of Pharmacopoeias

During its sixth session⁵ this committee recommended that the authorities responsible for pharmacopoeias in the different countries should inform WHO of new pharmaceutical products which might be described in the International Pharmacopoeia (*Pharmacopoea Internationalis*) and for which non proprietary names should be given for national and international use. The choice of name would be left to an expert subcommittee. WHO would then communicate the approved name to the Member States and would recommend its adoption for national use.

Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel

The expert committee during its first session⁶ especially stressed the desirability of making inquiries regarding the medical education in general and the training in hygiene and social medicine in particular, given in various countries. This extremely complex question is of great importance since the necessity of reorganizing medical curricula above all from the point of view of public health is becoming more and more evident.

⁴ *World Hlth Org techn Rep Ser* 1950 26 (to be published) see also *Chron Wld Hlth Org* 1950 4 161

⁵ *World Hlth Org techn Rep Ser* 1950 29 (to be published) a summary of the report will be published in a forthcoming number of the *Chronicle*

⁶ *World Hlth Org techn Rep S* 1950 22 (to be published) see also *Chron World Hlth Org* 1950 4 119

Expert Committee on Health Statistics

The Board approved the publication of the report on the second session of the Expert Committee on Health Statistics² this report includes annexes containing the reports of the subcommittees on the definition of stillbirth and abortion on the registration of cases of cancer and on hospital statistics

Regulations applicable to advisory groups and expert committee

The Executive Board drafted amendments to the new regulations applying to advisory panels and expert committees which had been provisionally adopted by the Third Health Assembly The revised regulation

FIG 2 SIXTH SESSION OF THE EXECUTIVE BOARD



Left to right: Lt Col M. Jafa and Professor M. De Laet, Vice Chairmen
Dr H. S. Gea, Chairman

stipulate that the number of experts taking part in committee meetings should be reduced the Board considered however that restrictions of this nature would make it difficult to ensure appropriate representation of the various aspects of the problems which the expert committees are asked to study It considered that this difficulty might be overcome by setting up advisory panels of experts nominated by the Director General and commissioned to provide by correspondence and without remuneration information or technical reports on progress in their special subjects These and other suggested changes in the regulations applying to expert committees will be submitted to the Fourth Health Assembly

Supplies for Governmental Programmes

Although WHO is not an organization for sending supplies to governments it is none the less true as pointed out by Dr Stampar, that sending certain supplies to governments is sometimes indispensable to enable the latter to carry out specific programmes. Clearly, the granting of such supplies should be in response to real needs. A working party, under the chairmanship of Dr F. J. Brady (alternate to Dr Hyde), was appointed to study the criteria which WHO can employ in answering requests for supplies. In application of the established principles \$100 000 allocated for this purpose have been distributed. Some countries—Afghanistan, Ethiopia, Finland, India, the Hashemite Kingdom of Jordan, Monaco, Portugal, Thailand, and Yugoslavia—have thus been granted supplies for the control of malaria and leprosy, for nursing care, etc.

Relations with UNICEF

Agreement has been reached regarding principles governing co-operation between UNICEF and WHO in matters of personnel, a question, primarily, of procedures to be followed by the personnel of the two organizations when collaborating in the planning of joint projects and programmes.

The Board stressed the importance of the BCG research programme to be undertaken jointly with UNICEF. Finally, the report on the fourth session of the Joint Committee on Health Policy, UNICEF/WHO⁸ was adopted by the Executive Board.

Technical Assistance Programme

The funds allocated for the technical assistance programme will probably be available before the end of 1950. Fifteen requests for assistance have already reached WHO. Sir Arcot Mudaliar expressed the view that, in so far as possible, permanent staff should be assigned to carry out the programme and that the following problems should be given priority: stimulation of campaigns against communicable diseases; professional and technical education; fellowships; and public health administration. A special committee of the Executive Board will be responsible for advising on all aspects of the technical assistance programme. Operations judged necessary, however, will have to be approved by the Technical Assistance Board.

Publications

Starting with the first number of Volume 3, the *Bulletin of the World Health Organization* will be published in a single edition containing articles either in English or in French according to the language in which they

⁸ A summary of this report will be published in a forthcoming number of the *Chronicle*.

have been submitted and giving summaries in the two working languages of the Organization. For reasons of economy the *International Digest of Health Legislation* will no longer be published in fascicle form. The *Digest* which is published in the two working languages of the Organization will contain an index arranged according to subject and country.

A supplementary Latin index for the *Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death* will be prepared in 1950 for the use of countries which cannot employ the French, English or Spanish editions of the *Manual*.

MEMBERSHIP OF THE EXECUTIVE BOARD

The designating country is given in parentheses after each member's name. New members are indicated by an asterisk (*).

- * A. Amy, Consul-General of El Salvador in Geneva (El Salvador) (Alternate to Dr J. Allwood Paredes, who was absent)
- * Professor G. A. Canaperis, Chief Medical Officer, Office of the High Commissioner for Hygiene and Public Health, Rome (Italy)
- * Dr M. Charnes, Zone Medical Inspector, Public Health Service, Santiago (Chile)
- * Dr S. Daengsvang, Deputy Director-General of Health, Bangkok (Thailand)
- Professeur M. De Laet, Secrétaire général du Ministère de la Santé publique et de la Famille, Brussels (Netherlands) (*Vice-Chairman*)
- Dr H. S. Gear, Deputy Chief Health Officer for the Union of South Africa, Cape Town (Union of South Africa) (*Chairman*)
- Dr C. L. González, Director of Public Health, Ministry of Health and Social Welfare, Caracas (Venezuela)
- Dr J. A. Höjer, Director-General of Public Health, Stockholm (Sweden)
- Dr H. Hyde, Medical Director, US Public Health Service, Federal Security Agency, Washington, D.C. (United States of America)
- Lt-Col. M. Jafar, Director-General of Health, Karachi (Pakistan) (*Vice-Chairman*)
- Dr W. de Leon, Director of Laboratories, Department of Health, Manila (Philippines)
- Dr M. Mackenzie, Principal Medical Officer, Ministry of Health, London (United Kingdom)
- Sir Arcot Mudaliar, Vice-Chancellor, University of Madras (India)
- Professeur J. Parisot, Doyen de la Faculté de Médecine, Nancy (France)
- Dr G. H. de Paula Souza, Professor and Director, Faculty of Hygiene and Public Health, University of São Paulo (Brazil)
- Dr A. Stampar, President of the Yugoslav Academy of Sciences and Arts, Professor of Public Health and Social Medicine, University of Zagreb (Yugoslavia)

Members designated by Poland and by Turkey were absent.

Supplies for Governmental Programmes

Although WHO is not an organization for sending supplies to governments it is none the less true as pointed out by Dr Stampar, that sending certain supplies to governments is sometimes indispensable to enable the latter to carry out specific programmes. Clearly, the granting of such supplies should be in response to real needs. A working party, under the chairmanship of Dr F. J. Brady (alternate to Dr Hyde), was appointed to study the criteria which WHO can employ in answering requests for supplies. In application of the established principles \$100 000 allocated for this purpose have been distributed. Some countries—Afghanistan, Ethiopia, Finland, India, the Hashemite Kingdom of Jordan, Monaco, Portugal, Thailand, and Yugoslavia—have thus been granted supplies for the control of malaria and leprosy, for nursing care, etc.

Relations with UNICEF

Agreement has been reached regarding principles governing co-operation between UNICEF and WHO in matters of personnel, a question, primarily, of procedures to be followed by the personnel of the two organizations when collaborating in the planning of joint projects and programmes.

The Board stressed the importance of the BCG research programme to be undertaken jointly with UNICEF. Finally, the report on the fourth session of the Joint Committee on Health Policy, UNICEF/WHO^a was adopted by the Executive Board.

Technical Assistance Programme

The funds allocated for the technical assistance programme will probably be available before the end of 1950. Fifteen requests for assistance have already reached WHO. Sir Arcot Mudaliar expressed the view that in so far as possible, permanent staff should be assigned to carry out the programme and that the following problems should be given priority: stimulation of campaigns against communicable diseases, professional and technical education, fellowships, and public health administration. A special committee of the Executive Board will be responsible for advising on all aspects of the technical assistance programme. Operations judged necessary, however, will have to be approved by the Technical Assistance Board.

Publications

Starting with the first number of Volume 3, the *Bulletin of the World Health Organization* will be published in a single edition containing articles either in English or in French according to the language in which they

^a A summary of this report will be published in a forthcoming number of the *Chronicle*.

have been submitted, and giving summaries in the two working languages of the Organization. For reasons of economy the *International Digest of Health Legislation* will no longer be published in full circle form. The *Digest*, which is published in the two working languages of the Organization, will contain an index arranged according to subject and country.

A supplementary Latin index for the *Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death* will be prepared in 1950 for the use of countries which cannot employ the French, English or Spanish editions of the *Manual*.

MEMBERSHIP OF THE EXECUTIVE BOARD

The designating country is given in parentheses after each member's name. New members are indicated by an asterisk (*).

- A. Amy, Consul-General of El Salvador in Geneva (El Salvador) (Absent to Dr J. Allwood Parades, who was absent)
 - Professor G. A. Canapena, Chief Medical Officer, Office of the High Commissioner for Hygiene and Public Health, Rome (Italy)
 - Dr M. Charnes, Zone Medical Inspector, Public Health Service, Sacramento, Calif.
 - * Dr S. Daengsvang, Deputy Director-General of Health, Bangkok (Thailand)
 - Professor M. De Laet, Secrétaire général du Ministère de la Santé publique et de la Famille, Brussels (Netherlands) (*Vice Chairman*)
 - Dr H. S. Gear, Deputy Chief Health Officer for the Union of South Africa, Cape Town (Union of South Africa) (*Chairman*)
 - Dr C. L. González, Director of Public Health, Ministry of Health and Social Welfare, Caracas (Venezuela)
 - Dr J. A. Höjer, Director-General of Public Health, Stockholm (Sweden)
 - Dr H. Hyde, Medical Director, US Public Health Service, Federal Security Agency, Washington, D. C. (United States of America)
 - * Lt-Col. M. Jafar, Director-General of Health, Karachi (Pakistan) (*Vice Chairman*)
 - * Dr W. de Leon, Director of Laboratories, Department of Health, Manila (Philippines)
 - Dr M. Mackenzie, Principal Medical Officer, Ministry of Health, London (United Kingdom)
 - Sr Arcot Mudaliar, Vice-Chancellor, University of Madras (India)
 - Professor J. Parisot, Doyen de la Faculté de Médecine, Nancy (France)
 - Dr G. H. de Paula Souza, Professor and Director, Faculty of Hygiene and Public Health, University of São Paulo (Brazil)
 - Dr A. Sammar, President of the Yugoslav Academy of Sciences and Arts, Professor of Public Health and Social Medicine, University of Zagreb (Yugoslavia)
- Members designated by Poland and by Turkey were absent.

RECENT ADVANCES IN RABIES

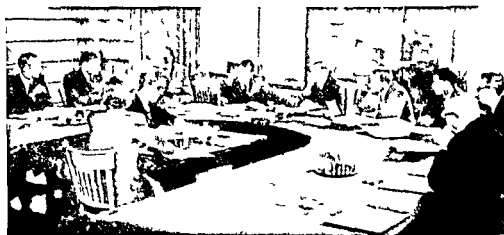
Great progress in the knowledge of rabies has been made in the last decade and it is to be expected that before long more important data will become available with regard both to methods of prophylaxis and treatment and to the ecology, immunology, and pathology of the disease.

Most of the recent advances in this field have been the outcome of efforts developed by rabbiologists in their particular country. Rabies, however, remains a subject of universal interest and as such calls for international action.

International History

An International Rabies Conference was held in Paris in 1927 under the auspices of the Health Organization of the League of Nations. As a result of the recommendations of this conference extensive statistical data were collected from all rabies treatment centres and analysed annually.

FIG. 3. EXPERT COMMITTEE ON RABIES. FIRST SESSION.



Left to right (seated round table): Dr K. Habel, Dr H. Koprowski (Rapporteur), Dr P. Lépine (Vice Chairman), Dr C. Kilmt (WHO), Dr I. A. Galloway (Chairman), Dr M. M. Kaplan (WHO), Dr M. L. Ahuja, Dr H. N. Johnson, Dr G. Stuart (WHO).

Altogether data concerning over 1 600 000 persons treated were collected from which useful information was obtained¹. Final proof of the value of Pasteur treatment could not, however, be obtained as no evidence was available with regard to the outcome of the disease in treated and untreated individuals.

Following proposals made at the First World Health Assembly in 1948² rabbiologists all over the world were consulted by WHO on a number of technical questions by means of a questionnaire and an expert committee

¹ B. II. Hlth. Org. L. o. N. 1946 12 301

² Ch. on W. o. H. Hlth. Org. 1948 2 182

on rabies was convened in Geneva from 17 to 22 April 1950³ to examine the replies received review the newest developments and recommend a programme of action for WHO

Active Immunization

Differences which are known to exist in the biological quality of anti rabies vaccines have thrown doubt on the value of current vaccination procedures It is now well established that while certain batches of vaccine show a suitable potency others prepared under seemingly identical conditions appear to be of little value

Experiments which have been started in several institutes and more particularly in the National Institutes of Health Bethesda Md have led to various valuable discoveries with regard to the potency test the inactivation of the rabies virus the suppression of the paralysis producing factor and the standardization of the challenge virus

Mouse potency test

Improvement of vaccines in current use and production of a vaccine of standard potency became possible when Webster introduced a specially bred white Swiss mouse as testing animal These mice are cheap easy to breed and highly susceptible to rabies Later Habel developed a standardized mouse potency test which made it possible to check the potency of the vaccine at each stage of its production This test is based on a series of immunizing injections of constant concentration and quantity which are followed by intracerebral challenge of tenfold virus dilutions on the 14th day Mice are observed for another two weeks and then the 50% mortality endpoints are determined A thousandfold difference in protection between controls and vaccinated animals is the minimum protection required Owing to the use of this technique the importance of many factors in the production of a potent vaccine has been ascertained such as the need of a high infectious titre of the brains to be used for vaccine which should reach at least 10^6 the kind and concentration of the inactivating chemical

Th f ll w g w prese t t th meet ng

M mb
D M L Ah j Directo C t l Res rch f t t k l Ea t P j b l d
D I A G l l w y D t V R se h l P b ght S y U d K gd m (Ch rm)
D K H b l Ch f l bo t ry of l fcc D se M b g l l N tuo l l es
f l l h (US P b l H lth Serv) Bethesda Md USA
D H N J h L b t f th l ern tuo l H lth D n Rock f l l r F d tu N w
Yo k City NY USA
D H K prowsk A t (D t S t f v l nd Rock al Rese rch Led l Labo t se
P l R NY USA (R pp)
D P Lép Ch f d Service d Ul V ru l t t t P t P is F nce (l l e Ch lrm)
C op d M mb
D M B l t d Direct d l l t t t P t d l l Th Iran
S
t l l
D M M k pl V ry Off Ep d m l g u l S d Sect WHO
O C K l m M d l Off f p d m l g l S d ex Sect WHO
Th rep rt f th mm t l l l be p b l h d H l l l h O g l ch R p S 28

the time and temperature required for complete inactivation—which must be calculated so that maximal antigenicity is retained. The universal and continuous employment of these potency test methods would ensure a supply of dependable vaccines, which cannot be guaranteed by the mere application of uniform production methods following a single test. Every producer should therefore be required to submit a sample of each batch of vaccine to a central laboratory for potency testing.

Ultraviolet (UV) irradiated vaccine

Rabies vaccines inactivated by ultraviolet irradiation have consistently given high protection values in the mouse potency test. The titres are usually significantly higher than those obtained with other vaccines in current use. It has been found that as much as five times the minimal inactivating exposure has to be given before denaturation of the antigen takes place. There exists, therefore, a broad margin in which it is possible to work safely. A twofold minimal inactivating exposure is usually recommended. Owing to other difficulties in the preparation of vaccines, the employment of a specially trained technician is required. Liquid preparations need the addition of an enzyme inhibitor like merthiolate 1:10 000 after the virus has been inactivated, to ensure proper keeping qualities. Apart from an initial drop in titre, dried preparations keep their antigenicity well and can be recommended for use in countries where production and storage facilities are not adequate. The UV vaccine is now used for about half of the patients coming for treatment in the USA. This number is estimated at about 15 000.

Chick embryo vaccine (Flury strain)

A street virus recovered from a human case (Flury) has been subcultured in chicken and later adapted to chick embryos. In the course of numerous passages this strain has completely lost its pathogenicity for dogs when given by routes other than the intracerebral one. The embryo itself finely ground and freeze dried constitutes the vaccine. Large scale trials in dogs in the USA have given very promising results. Not only is the vaccine innocuous for dogs but it also shows some promise of conferring immunity for a longer period than other vaccines used so far. In experiments on a few human volunteers (cancer patients) it proved itself to be innocuous even when given in high doses.

This vaccine cannot be tested with Habel's mouse potency test. A special test, carried out on guinea pigs had to be developed. These are immunized by intramuscular injection and challenged after three weeks with street virus given intramuscularly.

Paralysis producing factor

It had been found that so-called 'paralytic accidents', which had been ascribed entirely to infection with fixed virus contained in the vaccine

continued to occur when completely killed vaccines were used. Experiments in animals led to the discovery that similar symptoms and pathological changes in the central nervous system could result from serial injections of normal brain tissue. A systematic test was developed to check these somewhat irregular occurrences as it was found that the addition of adjuvants—lanolin and paraffin oil with killed BCG bacilli or *Mycobacterium butyricum*—to one dose of normal brain resulted fairly consistently in paralysis of the experimental animal. This test is now applied to rabies vaccines to determine the content of paralysis producing factor.

Successful attempts have been made to eliminate this factor from rabies vaccines by subjecting them to benzene extraction from the dried state. The remainder of the benzene is removed by ether treatment and the dried sediment taken up in calcium acetate. The washed sediment constitutes the final product. At present work is being carried out with a view to the production of this vaccine on a commercial scale.

Problem of a standard vaccine

Differences in results obtained in the mouse potency test were found to be due to the varying antigenic composition of substrains of Pasteur's original fixed virus. Some of them were capable of breaking through a high degree of immunity which had been demonstrated by a different strain while others had lost their invasiveness to a large extent. In the USA an intermediate strain has been chosen as a standard and is now being kept in the form of frozen mouse brain pools and distributed once annually to producers who use them as seed virus for a maximum of two mouse passages so as to obtain enough challenge virus to last them for the year.

It is hoped that it will be possible in the near future to produce a standard reference vaccine which can then be used to control each test and which will permit immediate recognition of any faulty results of the potency test.

Passive Immunization

Hyperimmune antirabies serum

The idea of passive immunization against rabies is more than fifty years old. Reports have been partly favourable particularly as to the use of a sero vaccine and partly discouraging.

In recent years modern methods of purification and of concentration of the antirabies serum fractions containing the neutralizing antibodies have made possible the preparation of hyperimmune serum. This serum is obtained by repeated injection of fixed strains of rabies in rabbits or sheep. The animals are bled at regular intervals and large pools of serum or plasma prepared. These are fractionated (by such substances as ammonium sulphate, sodium sulphate or methanol) and the gamma or beta and gamma

globulin fractions concentrated. The original neutralizing antibody titre has thus been increased a thousandfold, while at the same time the protein level was maintained at the normal value of 7%. With this serum results have been obtained in animals which are superior to any results obtainable with vaccine alone. Protection was afforded only when serum treatment was given not later than 72 hours after infection. Optimal protection was obtained when serum treatment was followed by a course of vaccine. No interference between passive and active immunity has been observed. Serum treatment suggests itself whenever severe exposure has occurred, because it has been demonstrated that in those cases where it does not of itself afford protection it tends to prolong the incubation period and thus allows more time for active immunity to develop.

New Experiments Sponsored by WHO

The WHO Expert Committee on Rabies was of the opinion that the new methods of active and passive immunization had reached a suitable stage of development for trials in the field.

Mass vaccination of dogs

It is planned to hold a demonstration of mass vaccination of dogs with chick embryo vaccine (Flury strain) in Israel where the incidence of rabies has shown a considerable increase as a consequence of neglect of regular control measures during the political disturbances.

The collaboration of a well organized veterinary service has been promised and it will be the responsibility of WHO to assist in the organization of this demonstration which will not only give actual help where it is needed but also yield further valuable information on among other things, vaccination paralysis and the duration of immunity under field conditions. It will also it is hoped give an impetus to the idea of fighting rabies by prophylactic immunization of dogs.

Immunization of human beings

The experiments undertaken in the USA with the antirabies hyperimmune serum have proved most encouraging. However, the method cannot be put into general use until the experimental results are confirmed by a large scale trial. This problem was one of the most important on the agenda of the committee. After considerable discussion a detailed plan for such a project was worked out. It was agreed to entrust a field trial on this question to Dr Baltazard, Director of the Institut Pasteur in Teheran.

It was learned that on an average 50 severe wolf bites occur annually in Iran with a mortality which ranges between 30% and 50%. These bites occur in a series and when a wolf enters a village it is almost certain to be rabid.

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FIG 4 EXPERT COMMITTEE ON HEALTH STATISTICS SECOND SESSION



Left to right (seated round table) Dr M. de Vado (ILO) Dr D. Cuatrecasas (D. P. F. Deno x)
Dr P. Stocks (Chairman) Dr M. Pascua (WHO) Dr Marie Cakrtova (WHO)
Dr H. L. Dunn F. E. Linde (United Nations)

As regards hospital statistics the committee stressed the need to discover to what extent and by what methods it would be possible to make hospital statistics more representative of the communities from which hospital patients are drawn. The committee considered that surveys of families or of those benefiting by medical services of all kinds would make possible a broader interpretation of hospital statistics and would thus increase their value from the public health viewpoint.

The committee also examined the question of medical certificates and the use of the *Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death*. It discussed the difficulties inherent in the use of the *Manual* in different countries and reaffirmed the position it had taken at its first session. It stressed the importance of encouraging national administrations to use the *Manual* both by preparing descriptive pamphlets and instruction manuals and by stimulating and if necessary conducting training courses for morbidity and mortality coders. Further more benefiting by the experience obtained in certain countries WHO should promote the education of physicians in the proper use of the international form of medical certificate of cause of death by preparing and circulating pamphlets and by developing programmes for the training of physicians and medical students.

Finally as regards the definitions of the terms "live birth" and "foetal death" the committee adopted the proposal of the subcommittee appointed to examine this problem. These definitions are intended—after their

The Expert Committee on Rabies emphasized that there are many gaps in our knowledge of the epizootiology of rabies and that a great deal of research is required to give a more complete picture of the situation

HEALTH STATISTICS

The Expert Committee on Health Statistics held its second session in Geneva from 18 to 21 April 1950¹. Its principal task was to examine the conclusions of the three subcommittees which recently met in Paris and Geneva to study methods of improving cancer² and hospital statistics³ and to decide on a new definition of stillbirth⁴. The Expert Committee on Health Statistics adopted the reports of the three subcommittees adding to them, however, a certain number of observations.

Concerning cancer statistics the committee stressed the fact that the only way to obtain accurate survival and recovery rates which will be beyond criticism is to reduce the numbers of patients lost sight of and of those whose condition was uncertain to a minimum so that it makes no appreciable difference what assumption is made about them. The committee was fully aware, however, that such an aim often cannot be completely realized and it therefore emphasized the importance, for purposes of comparability, of formulating rules for dealing with the uncertain groups and of agreeing to use them. The committee felt that it was essential that a set of rules, even if imperfect, should be proposed by the World Health Organization and should for the sake of uniformity be used even by those who might deem it unsatisfactory in certain respects.

¹ The following took part in this session:

Members

- Dr D. Curjel, Chief Division of Epidemiology and Vital Statistics, Ministry of Health and Social Welfare, Caracas, Venezuela
Dr P. F. Denoi, Chef des Services techniques et de la Section du Cancer, Institut national d'Hygiène, Paris, France
Dr H. L. Dunn, Chief, National Office of Vital Statistics (US Public Health Service), Washington, D.C., USA
Dr P. Stocks, Chief Medical Statistician, General Register Office of England and Wales, London, United Kingdom (Chairman)

Representative of the United Nations

- F. E. Linder, Chief, Population and Vital Statistics Section, Statistical Office, Lake Success, N.Y.

Observer

- Dr M. de Vado, Social Security Section, ILO

Secretariat

- Dr M. Pascua, Deputy Director, Division of Health Statistics, WHO (Secretary)
Dr Marie Cakrlova, International Nomenclature of Diseases and Causes of Death Section, WHO
Dr M. Kacprzak, Professor of Hygiene, Director, State School of Hygiene, Warsaw, Poland, was unable to attend.

The report of the committee will be published as *World Health Organization Report Series* 1950, 25.

See page 86

Ch on *World Health Organization* 1950, 4, 167

Ch on *World Health Organization* 1950, 4, 17

given on these documents. In this connexion Dr J Clemmesen, Chief of the Danish Cancer Registry, found that the higher incidence of gastric cancer in Sweden as compared with that in England was partly explained by the fact that death certificates are drawn up by clergymen in certain Swedish provinces. Furthermore it is impossible to compile statistics of cancer cases from which useful conclusions can be drawn if adequate vital statistics are lacking. A statistical comparison has no scientific significance unless the data are classified according to sex, age groups, professional and ethnological groups of individuals or other characteristics relevant to the problems being studied. In most cases such data are not available. Finally experimental research is rarely undertaken to assist statistical analysis. Under these conditions numerous interesting statistical observations are doomed to remain mere hypotheses.

Dr Clemmesen, in a paper submitted to WHO, concludes that

In consequence of these extensive demands a close collaboration with the public statistical services involved is vital to the development of good statistics. However in most countries civil servants will think and work quite differently from biological research workers with their eternal endeavour to raise problems and change methods. To this we may add a frequent tendency among the former to take a more national and less universal point of view than so far common in the medical world. But there is no way out of such difficulties except urging on the highest administrative level the necessity of providing the figures required for medical observations. Possibly an international authority for instance under the United Nations would afford the best means of establishing international collaboration on medical statistics.

New International Effort

A WHO Subcommittee on the Registration of Cases of Cancer met in Paris from 6 to 10 March 1950¹ to review the statistical problems involved in the study of cancer². In particular the subcommittee studied the question of mortality and morbidity statistics, the difficulties involved in the statistical presentation of therapeutic results and the advisability of continuing the publication of the *Annual reports on the results of radiotherapy in cancer of the uterine cervix*.

The following took part in this session

- Memb
- Dr J Clemmesen, Chief of the Danish Cancer Registry, Copenhagen, Denmark (Chairman)
 Dr P F Denz, Chief of the Services Techniques de la Section de Cancer, Institut National d'Hypertension, Paris, France (Member of WHO Expert Committee on Health Statistics)
 Dr H F Dorn, Director of Statistics, National Cancer Institute, Bethesda, Maryland, USA (Representative of the Health Service, Washington, D.C., USA) (Representative of the Health Service, Washington, D.C., USA)
 Dr P Stock, Chief of Medical Statistics, General Registry Office of England and Wales, London, United Kingdom (Member of WHO Expert Committee on Health Statistics)
- C
- Dr J Hymann, Editor of the *Journal of Radiotherapy*, Stockholm, Sweden
- S
- Dr M Pascu, Deputy Director of Health Statistics, WHO
- The report of the subcommittee will be published in the *Monthly Bulletin of the WHO*, 1950, 25

adoption by the World Health Assembly—to be included in the national regulations relating to statistics on birth and stillbirth

The next session of the committee which will probably take place at the beginning of 1951, will be devoted to the study of the problems raised by morbidity statistics. The session will be concerned, in particular with outlining, evaluating, and selecting projects requiring international action in this field

PROBLEM OF CANCER STATISTICS

Since the publication in 1775 of the classical work of Pott on chimney sweeps' cancer studies devoted to the etiology of cancer have become more and more numerous. Pott not only described the clinical symptoms and the etiology of this variety of cancer but he also indicated certain preventive measures. More than 140 years elapsed however before cancer was experimentally induced and the medical profession fully understood the importance of carrying out statistical and experimental studies on this subject. An example of failure to pursue this type of study is the lack of attempts to confirm the discovery made in 1926 by Young and Russell that there is a causal relation between alcohol consumption and the incidence of cancer of the upper digestive tract.

Value of Available Data

It is now no longer possible to doubt that certain studies on the etiology of cancer can lead to the discovery of new methods of prevention. The carcinogenic effect of certain substances e.g. pitch, aniline dyes, tar, radioactive substances and x rays has been demonstrated both experimentally and statistically. More often however various factors have been held responsible without any scientific proof. It has been stated that childbirth favours the appearance of cancer of the uterine cervix, that the incidence of gastric cancer both in Sweden and in Czechoslovakia is three times greater than in England, that cancer of the breast is almost unknown among Japanese women and that cancer is much more prevalent among Italians in the northern than among those in the southern provinces. Until such statements have been subjected to rigorous experimental investigation and statistical analysis they will have no practical value.

Research workers who undertake statistical studies of cancer however always have to overcome considerable difficulties. For example most statistics on cancer are based on the analysis of death certificates and there are sometimes reasons for doubting the accuracy of the diagnoses.

made in England and Wales of geographical variation in mortality from cancer of specific sites. These studies were examined by the subcommittee which felt that such data might lead to interesting conclusions concerning the etiology of cancer. Consequently it recommended that national committees and other appropriate agencies should undertake more studies of this nature. In cases where these studies bear upon the difference between urban and rural areas it will be necessary to define exactly what is understood by the words "rural" and "urban" and to indicate clearly what corrections have been made for the deaths of non residents.

Morbidity statistics and cancer registration

In hospitals in many countries such as Canada, France and Great Britain cancer cases are registered and followed up after treatment. Further more a special effort is at present being made in Denmark, Norway and the USA to ascertain the total cancer morbidity in selected cities and districts.

It is clear that such research is very valuable since it not only increases the possibility that in the future patients developing cancer will at the earliest opportunity, receive the best treatment available but it will also increase our knowledge of the morbidity of cancer and its relation to social and environmental factors. The subcommittee decided that the use of methods for registering cancer cases which include information on the post treatment histories of the patients should be encouraged. The final aim will be to include in such registration systems all persons suffering from cancer thus eliminating errors from incomplete observations and permitting the determination of exact morbidity, survival and apparent recovery rates. Efforts made in many countries to determine the total incidence of cancer in certain selected areas will also be encouraged. The subcommittee did not feel however that it should recommend legislation for the compulsory notification of cancer.

In order to achieve greater precision in and to improve the comparability of data relating to cancer morbidity and the therapeutic results obtained national committees and other appropriate agencies will be asked to prepare definitions illustrated by diagrams if possible of the principal anatomical sites affected by cancer and of the stages of the disease that is the extension of the neoplasm. These definitions will be submitted to the subcommittee for discussion and approval.

Statistical presentation of therapeutic results

At present there is no universally accepted method for calculating survival and apparent recovery rates for cancer. Consequently it is not possible to make an exact comparison of the results of different treatments at a single fixed interval—for example five years—before results are recorded.

Mortality statistics

So far there is unfortunately, no general agreement concerning the statistical definition of the term "cancer". In fact, in the International Lists of Diseases and Causes of Death—the precursors of the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*³—Hodgkin's disease, leukaemia and aleukaemia, mycosis fungoides and some other less common diseases were not classified as cancer. It is necessary, therefore, to find some way of removing all doubt concerning the statistical definition of cancer without at the same time making it impossible to compare future statistics with those already existing. For this reason the subcommittee recommended that the total number of deaths from cancer should be based on the classification given in the *Manual*. The diseases which have just been mentioned will therefore be incorporated in the cancer group. The subcommittee requested however that to permit comparison with past statistics the following subgroups should also be shown: cancer (excluding Hodgkin's disease, leukaemia and aleukaemia), Hodgkin's disease, leukaemia and aleukaemia.

Some members of the subcommittee felt that certain problems had arisen in the use of the section entitled "Neoplasms" in the *Manual*. For instance, the *Manual* does not give sufficient details about certain anatomical sites. Furthermore, the inclusion of secondary sites in the same subsection as primary sites also gives rise to certain difficulties, as does the lack of precision in the definitions of the various sites. Finally, when cancer is mentioned on death certificates along with other causes, the presentation of the statistical data is not always easy.

The subcommittee expressed the wish that users of the *Manual* should communicate to WHO information concerning difficulties encountered in connexion with the section on neoplasms, together with specific suggestions for overcoming them. The information thus collected will be studied by the subcommittee during a forthcoming session.

There is one particularly important task which devolves upon those helping to compile cancer statistics: they must endeavour to evaluate and improve the accuracy of cancer diagnoses given on death certificates. During recent years too little attention has been paid to the reliability of the data entered on death certificates. For this reason the subcommittee deemed it advisable to draw the attention of the national committees on health statistics and of other appropriate agencies to the need for a systematic comparison of the diagnoses given on death certificates with the results obtained from postmortem examinations and from other relevant sources of information.

Another problem examined by the subcommittee was that of the variations found in the geographical distribution of cancer. Studies have been

AFRICAN RICKETTSIOSES

Since the discovery of the transmission of classical typhus by Nicolle (1909) knowledge of the rickettsioses has been progressively extended and during recent years the existence of new pathological entities such as Q fever has been established. Although theoretical knowledge of the epidemiology, clinical course and laboratory investigation of the rickettsioses is now fairly complete, the same cannot be said regarding equally important problems such as the geographical distribution, the prevention and the treatment of these diseases. In particular, despite the advances made especially during the last ten years, data on the geographical distribution of the rickettsioses throughout the African continent are still fragmentary and incomplete. This state of affairs may be readily explained by the lack of specialized laboratories and the shortage of doctors and qualified technicians, especially in tropical Africa where the organization of adequate services began only a few years ago. Furthermore, physicians have had to face the more urgent problems presented by diseases such as trypanosomiasis or malaria.

The work of Blanc, Cambournac, Ceccaldi, Garnham, Gear, Giroud, Jadin, Le Gac, Vaucel, etc., has already made it possible not only to assemble important data on the distribution of rickettsioses in various parts of Africa but also to recognize the clinical and epidemiological aspects of these diseases.¹

However, it was necessary to determine the present position and to co-ordinate all these data with a view to further research. This task was successfully accomplished by a Joint OIHP/WHO Study Group on African Rickettsioses which met in Brazzaville from 8 to 14 February 1950.²

After reviewing the results of research carried out on the geographical distribution of the rickettsioses in Africa, the study group considered in succession the characteristics shown by these diseases on the African

The papers submitted by the following members will be reviewed by the following members of the Epid. Mol. Biol. & Hyg. Int. Study Group.

The following were present at this meeting:

Members:

Dr E. A. J. leu, Directeur d'Hygiène sociale, Ministère de l'Intérieur public, Département de la Population, France.

Dr G. Blane, Directeur de l'Institut Pasteur, Maroc, Casablanca, Morocco.

Dr P. C. G. R. H. M. R. der, Directeur de l'Hygiène publique, London School of Hygiene & Tropical Medicine, London, England.

Dr J. G. R. A. J. A. H. Rodh, Directeur de l'Hygiène sociale, Institut de Médecine tropicale, Université de Léopoldville, Léopoldville, Congo (Kinshasa).

Dr L. T. R. M. R. H. M. R. der, Directeur de l'Hygiène sociale, Institut de Médecine tropicale, Université de Léopoldville, Léopoldville, Congo (Kinshasa).

Dr L. T. R. M. R. H. M. R. der, Directeur de l'Hygiène sociale, Institut de Médecine tropicale, Université de Léopoldville, Léopoldville, Congo (Kinshasa).

Dr L. T. R. M. R. H. M. R. der, Directeur de l'Hygiène sociale, Institut de Médecine tropicale, Université de Léopoldville, Léopoldville, Congo (Kinshasa).

Secretary:

OIHP: Dr M. G. R. H. M. R. der, Directeur de l'Hygiène sociale, Ministère de l'Intérieur public, Département de la Population, France.

WHO: Dr Y. M. B. R. H. M. R. der, Directeur de l'Hygiène sociale, Institut de Médecine tropicale, Université de Léopoldville, Léopoldville, Congo (Kinshasa).

although appropriate for certain types of cancer, is not necessarily suitable for all kinds of neoplasms. The subcommittee recommended that survival and apparent recovery rates should be calculated for successive intervals of one year, cumulative rates for periods greater than one year being obtained by multiplication of consecutive annual rates. In addition the subcommittee adopted certain definitions and rules which it is hoped will help to improve cancer statistics, and recommended certain methods for calculating annual rates, for correcting the crude rates to allow for natural mortality and for adjusting the crude apparent recovery rate. A definition of survival rates was also given by the subcommittee.

Annual Reports on the Results of Radiotherapy in Cancer of the Uterine Cervix

The subcommittee considered the *Annual Reports on the Results of Radiotherapy in Cancer of the Uterine Cervix*, edited by Dr J. Heyman, the fifth volume of which was published under the auspices of the British Empire Cancer Campaign (London), the Donner Foundation (Philadelphia), the Cancerföreningen (Stockholm) and the World Health Organization.

The subcommittee felt that the systematic collection and presentation of statistical data on therapeutic results in accordance with standard rules and methods would undoubtedly encourage improvement of methods of treating cancer patients. Consequently it recommended that publication of the *Annual Reports* should be continued, but it suggested certain modifications which it considered necessary.

Future prospects

The subcommittee restricted itself during its first session to a discussion of specific problems of statistical methodology. Many other problems of considerable importance were passed over for the time being. The problem of cancer statistics remains extremely complex and difficulties which several generations of statisticians have not been able to overcome cannot be solved during one brief session. Nevertheless the meeting of the subcommittee represents an advance in this field. It is to be hoped that the adoption of generally accepted methods will lead to the discovery of new facts. The success of such an undertaking will not be assured, however, until every member of the medical profession ceases to regard medical statistics as a tedious and useless administrative activity and realizes that in the long run it is he himself who will benefit most from the advances in science and medicine which the compilation of adequate statistics will promote.

The Weil Felix reaction in murine typhus is comparable to that given by classical typhus but gives a lower agglutination titre

Tick typhus

Inoculation of the male adult guinea pig with blood from an infected person causes after an incubation period of four to seven days high fever accompanied by inflammation of the tunica vaginalis. In the guinea pig hypertrophy of the spleen is moderate

The Weil Felix reaction with OX2 and OX19 is variable and late. When the agglutination titre is higher with OX2 than OX19 the probability of tick typhus may be concluded. The reaction is rarely positive before the tenth day. With the OXk strain the reaction is more frequent and gives a higher titre than with the preceding antigens

Q fever

Intraperitoneal inoculation of the guinea pig with blood from an infected person gives rise to a very high fever which appears two or three days after inoculation and lasts five to seven days. Q fever often results in the death of the guinea pig although at a late stage. Inflammation of the tunica vaginalis is not seen but there is very marked enlargement of the spleen with perisplenitis and numerous rickettsiae are present in the cells of the peritoneal exudate

The Weil Felix reaction is negative with all strains. Agglutination of the rickettsiae is positive from a titre of 1/5 and may reach 1/40. These serological indications may persist for several years

Clinical Syndromes Provisionally Ascribed to the Rickettsioses

The experts agreed that the term *Congolese red fever* which actually covers diseases which may be related to one or other of the different varieties of typhus should be definitely abandoned⁴

Le Gac has reported the occurrence in Ubangi Shari of a severe epidemic disease whose symptoms are related to those of classical typhus. This disease has been called *savanna typhus* (*typhus des savanes*). However further research will be necessary to determine the identity of this disease

Research to be Undertaken

Important research remains to be undertaken on the precise geographical distribution of the different rickettsioses observed in Africa both in man and in certain animals. For example it is not understood why murine

⁴ *Congolese red fever* has been discussed by C. A. M. (1949) *B H World Hlth Org* 2 57

continent, present laboratory data, the clinical syndromes provisionally attributed to the rickettsioses and finally the prophylaxis and treatment of these diseases

Research to be undertaken especially concerning epidemiology and laboratory investigations was given particular attention by the study group

Characteristics of the Various Rickettsioses in Africa

While classical typhus may take epidemic form murine and tick typhus are found only as sporadic cases or isolated groups of cases³ The symptoms of classical typhus and those of murine typhus are fairly similar Inoculation sore (tache noire), maculopapular eruption covering the whole body, including the palms of the hands and soles of the feet as well as the symptoms of mental excitement during the febrile stage, are characteristic of tick typhus Q fever is characterized especially by pulmonary symptoms

Laboratory Investigation

Classical typhus

The intraperitoneal inoculation of a guinea pig with 4 or 5 ml of blood from a patient in the first days of the febrile stage causes after ten days, a febrile reaction which continues for five or six days ending in recovery The scrotal reaction which appears on the first passages through a male adult guinea pig subsequently diminishes It is less pronounced however, after injection of human blood than it is after inoculation with crushed infected lice

Serological diagnosis is made by means of the Weil Felix reaction In 90% of cases this is positive from the second week of the disease Differential diagnosis of murine typhus is not possible with the Weil Felix test An agglutination titre of 1/200 with OX19 is necessary before the reaction can be considered positive An increase in the titre during the course of the disease is however more significant than the titre itself For both classical and murine typhus agglutination titres are higher with OX19 than with OX2 and OXK

Murine typhus

In the male adult guinea pig inoculation with blood from an infected person causes orchitis with inflammation of the tunica vaginalis (Neill Mooser test) the endothelial cells in the liquid exudate and the cells of the tunica vaginalis are filled with rickettsiae

* At the present stage of knowledge human rickettsioses in Africa may be grouped as follows

(1) classical louse-borne typhus (epidemic) caused by *Rickettsia prowazekii*

(2) murine flea-borne typhus caused by *Rickettsia mooseri*

(3) tick typhus including boutonneuse fever Kenya typhus and South African tick bite fever caused by *Rickettsia conorii*

(4) Q fever or Derrick-Burnet's disease caused by *Rickettsia burnetii* or *Coxiella burnetii*

Treatment of the Rickettsioses

Besides the classical symptomatic drugs aureomycin and chloromycetin have proved to be very effective in the treatment of rickettsioses provided that they are administered at the onset of the disease. It is desirable that these antibiotics be rapidly placed at the disposal of doctors in areas where the rickettsioses are prevalent⁵

The report of the Joint WHO Study Group on African Rickettsioses will be published in the *Highly Infectious Diseases* 23

Reports from WHO Fellows

Many of the letters and reports received from WHO Fellows have been of such interest that they deserve to be read by a wider public. They demonstrate more vividly than a series of facts and figures both the nature of the fellowship programme and the response of the Fellows themselves. Selections from these reports have therefore been published from time to time but it must be emphasized that the opinions expressed are those of the Fellows.

Biochemistry and Clinical Experience

Dr S. A. Mahkota, Assistant Physician at the Clinic for Internal Medicine of the University of Ljubljana (Yugoslavia), has spent several months in Swiss university medical clinics studying recent advances in medical chemistry and their application to therapeutics. He ended his study trip with a visit to the United Kingdom.

During his study trip Dr Mahkota familiarized himself with recent biochemical discoveries relating to amino acids, proteins, vitamin B₁₂, adrenocorticotrophic hormone (ACTH), cortisone etc. which have opened up new perspectives in medicine. He studied their therapeutic application and paid particular attention to methods for the analysis and determination of these various substances. The experience which he gained as regards laboratory research on the one hand and therapeutics on the other led him to reconsider his views on the relationship of biochemistry to clinical medicine. He expresses his attitude as follows: "In spite of the momentous discoveries we could say a complete revolution brought about by modern biochemistry, this science alone will not be able to yield the desired results without a close co-operation with serology and clinical work. My earlier conviction that clinical work plays but a subordinate, less important role was shaken when I found that only careful clinical observations can supply biochemistry and other sciences with such ideas that will serve as signposts for modern research. These [clinical] observations still produce sound progressive ideas the real nature of which is defined by biochemistry and serology."

At the Medical Clinic of the Zurich Cantonal Hospital Dr Mahkota studied methods for the analysis of serum proteins by electrophoresis, the microscopical analysis of blood

typhus is distributed over almost the whole of Africa whereas classical typhus has rarely been reported there

Other subjects which should be studied are the possibility of the transmission of murine typhus by ticks and other members of the order Acarina, the antigenic characteristics of the various strains of the murine typhus virus, the possibility of classical typhus changing into murine typhus and vice versa the efficacy of various products for destroying or repelling ticks and the existence of rickettsioses transmitted by Trombididae

The study group feels that it is necessary for each region of Africa to have a specialized laboratory where diagnostic tests can be carried out, such tests being confirmed by central laboratories The latter would also be responsible for preparing standard suspensions of rickettsiae and distributing them to the regional laboratories This research could later be co-ordinated with laboratories in other continents

The study group recommended that WHO should supply technical and financial assistance to the central laboratories

Prophylaxis of the Rickettsioses

Preventive measures depend on the way in which the rickettsioses are transmitted Thus the method of choice for the prevention of classical typhus is the application of DDT The sterilization of louse excreta may be ensured by steeping personal effects in a weak antiseptic solution and then exposing them to sunlight Vaccination should be reserved for subjects who are specially exposed to infection

The control of the ectoparasites of the rodent reservoirs of murine typhus and the use of new rodenticides constitute the most important preventive measure against this form of typhus

The prevention of tick borne rickettsioses consists in freeing infested animals from their parasites whenever this measure can be applied e.g. in the case of domestic animals In this case the animals may be dipped in a solution of sodium arsenite or sprayed with DDT or gammexane in a dilution of 2 in 1 000 Controlled bush fires may also be useful against the ticks which swarm in such places

For subjects exposed to tick bites the prophylactic use of 0.25 g. of aureomycin or 0.5 g. of chloromycetin daily is recommended The use of these drugs should be continued for 21 days following exposure to the bites Larger doses of these antibiotics may check tick typhus provided that they are administered during the incubation period

For the prevention of Q fever the measures recommended include destruction of ticks sterilization of milk in infected areas and the isolation of patients to prevent interhuman transmission through the respiratory tract

Diagnoses are coded by the *International Statistical Classification of Diseases Injuries and Causes of Death* (1948)¹ with a view to correlating findings in this country with those in others

National Morbidity Inquiry in England and Wales

The following information concerning innovations in methods of collecting and compiling hospital statistics in England and Wales is from a note submitted to the WHO Subcommittee on Hospital Statistics (of the Expert Committee on Health Statistics) by Dr P Stocks Chief Medical Statistician General Register Office of England and Wales London

From 1st January 1949 arrangements were made for the large teaching hospitals and a representative number of other hospitals of different kinds to make records of in patients on a standard form This form requests information about sex age marital status occupation and birth weight of babies born in hospital as well as state of final diagnosis designed to show separately principal disease complications and accessory acute conditions and of certified cause in cases where death has supervened The reverse side of the form has been designed to allow for the easy recording of full details of all cases of accident injury or poisoning

"At the end of every month these forms completed in respect of patients who were discharged or who died during the month are sent to the General Register Office where they are coded the data being recorded subsequently on punched cards for tabulation by machine Approximately 350 000 forms were completed during the year 1949

WHO Antimalaria Activities in India

In 1949 four malaria demonstration teams began operating in India under the technical supervision of WHO and with supplies furnished by UNICEF These teams have been engaged mainly in demonstrating modern malaria-control methods and in training local personnel

An important part of the programme of the demonstration teams is the health education of the public An example of this aspect of their work comes from the team operating in the Jeypore Hills area in India With the help of the District Public Relations Officer public meetings were arranged in nine different centres and were attended by more than 3 000 people In some cases the meetings took place at weekly markets which are attended by the inhabitants of a wide circle of villages At one meeting a petition was presented asking the Government of India to continue malaria-control work indefinitely and a general appreciation of the results already achieved was voiced

Talks were given on the cause and prevention of malaria the programme of work of the demonstration team and the ways in which the public could co operate The chief purpose was to persuade the people to complete repair work on their houses a month or two earlier than usual and to impress upon them the necessity of leaving the walls and roofs untouched once the spraying with insecticides had begun

Lessons in public health including talks and demonstrations on insect borne diseases and their prevention were given in 13 schools and 727 schoolchildren were examined The lessons were attended by a number of adults and children not in school

During 1949 the team's operations covered an area of 800 square kilometres and afforded protection to a total population of 60 900 The quantity of technical grade DDT sprayed per square metre per year was 2.1 g and the quantity of DDT used per capita per year was 32.2 g No vectors were found nine months after the spraying in the houses (bedrooms) of villages sprayed in July and August 1949

specimens, and the drawing up of myelograms and splenograms. In the biochemical laboratory of the Medical Polyclinic of Basle University, he was particularly interested in the quantitative estimation of gamma globulins in blood serum. While working in the Medical Polyclinic at Berne he paid special attention to the effect of sympathicolitics on peripheral circulatory disturbances and hypertension. These phenomena are considered there from both the clinical and the biochemical aspects. He also carried out microscopical research on various types of anaemia. This work included the cytological control of the therapeutic effects of vitamin B₁₂ and research on antidotes of folic acid.

In London Dr Mahkota was able to attend extension courses given at the Post graduate Medical School of London Hammersmith Hospital. Thanks to the kindness of the Ministry of Health he gained some idea of the campaign against rheumatism visiting the Special Unit for Rheumatism in the Canadian Red Cross Memorial Hospital at Trplov as well as the Lister Institute.

Now that he has returned to his own country Dr Mahkota intends to continue his studies particularly on the blood and humoral dyscrasias and their relation to protein metabolism. He also wishes to share with other practitioners the experience he has acquired and is therefore planning a series of articles to appear in the medical press of Slovenia giving information on modern therapy in internal medicine and helping to popularize methods which up to now have not entered into routine use.

Notes and News

Mental Health Statistics in England and Wales

Improvements in the collection and compilation of statistics on mental health in England and Wales have been described in a note recently submitted to the WHO Subcommittee on Hospital Statistics (of the Expert Committee on Health Statistics) by Dr P. Stocks, Chief Medical Statistician, General Register Office of England and Wales, London. An extract from this note follows.

"The reorganization of the Mental Health Services provided an opportunity to revise the methods of collecting and compiling statistics of mental illness and defect. Some of the forms and classifications which had been in use for many years were out of date and the information obtained from them inadequate. In consultation with the General Register Office the Board of Control adopted two forms of hospital index card, one for cases of mental disorder, the other for cases of mental deficiency.

Index cards have been completed in all National Health Service mental hospitals and mental deficiency institutions in respect of all patients admitted or discharged on or after 1st January 1949. They are sent at regular intervals to the General Register Office where they are coded and machine card punched. More limited data were obtained about long stay patients, i.e. those in the hospitals or institutions before the 1st January 1949 who were still there on the 31st December 1949, so that the records will provide a complete census of patients who were in or passed through mental hospitals and mental deficiency institutions during the first year in which the scheme operated.

"The aim is to have information covering all aspects of mental health so that specific questions may be answered and general trends discussed. The information is in such a form that it can be compared and related to general medical and population statistics.



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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House-to-house visits were carried out in four villages. Blood smears from babies under one year and from suspected malaria victims were examined and paludine treatment was given to confirmed cases. Of these cases the largest number came from unsprayed villages. Health inspectors report that only a few cases of malaria were found in the sprayed villages and this is confirmed by information from the village people themselves.

Special Issue of the British Medical Journal on WHO

An international health number of the *British Medical Journal* was published on 6 May 1950. The issue contains the following articles dealing particularly with the work of the World Health Organization.

"The World Health Organization" by Dr Brock Chisholm, Director-General of WHO. A discussion of the Constitution, aims and scope, and the organizational structure of WHO.

"Advisory Services of the World Health Organization" by Dr Martha M. Eliot, Assistant Director General of WHO, Department of Advisory Services. A description of the special services provided by WHO to governments and of WHO field activities in malaria, venereal infections, tuberculosis, maternal and child health, etc.

"Origins of International Health Work" by Dr N. Howard Jones, Director, Division of Editorial and Reference Services, WHO.

"Therapeutic Substances in their International Aspects" by Sir Sahib Singh Sokhey, Assistant Director General of WHO, Department of Central Technical Services. A description of WHO's work in biological standardization, unification of pharmacopoeias, and addiction-producing drugs.

"Medical Statistics and World Health" by Dr Percy Stocks, Chief Medical Statistician, General Register Office, London. Member of the WHO Expert Committee on Health Statistics.

"The International Control of Epidemics" by Dr Yves Biraud, Director, Division of Epidemiology, WHO. A discussion on international epidemiological intelligence services, broadcasting of information, revision of sanitary legislation, and the drafting of new WHO sanitary regulations.

"The World Health Organization Library" by Miss Ethel Wigmore, Librarian, WHO. A description of the organization of the library and the assistance it gives to governments in the provision of medical literature.

The number also includes an illustrated article on some aspects of WHO activities in the field and three editorial articles on world health, international statistics and standardization of drugs.

IMPORTANT ANNOUNCEMENT

Beginning with Volume 3, No. 1, the *Bulletin of the World Health Organization* will no longer be published in separate editions in English and in French. Instead, a single edition will be published which will contain articles either in English or in French, according to the language in which they were submitted, with summaries in both languages.

DRUG NOMENCLATURE AND STANDARDS

Sixth Session of the Expert Committee on the Unification of Pharmacopoeias

Discussion of the reports and of the draft monographs prepared for the addendum to the *Pharmacopoea Internationalis* were the principal items on the agenda of the sixth session of the Expert Committee on the Unification of Pharmacopoeias held in New York from 20 to 29 April 1950.

During the session the committee also studied the setting up of some mechanism for assigning non proprietary names to drugs and examined various other problems including drug control and fellowships.

Pharmacopoea Internationalis (Ph I) and Addendum

The final details were settled for the simultaneous publication in English and French of the first edition of the *Pharmacopoea Internationalis*. A Spanish translation based on the English and French versions will be prepared later.

The World Medical Association had communicated to the committee its opinions concerning the table of doses and the International Union of Chemistry had approved the graphic and chemical formulae

The following took part in this study:

Dr H Baggstad Ramson Prof of Pharm ut Chem stry D h Sch l f Ph m cy
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Pole star F F l l rson Co k Ph m D Ch rma Comm ttee f R f the Ph m poe f
th U ed St t of Am r New York Cty NY USA f Ch m l
Dr I R Fahmy P of so of Ph rm cogn y Fo d l U esty C Egypt S t y Egypt
Pharmacopoe a C mm ss n
Dr H Flück P of seu d Pharma gnos à l E ol P lyt hn y F de l 2 h Sw l d
M mb de la Comm s on fédér l d l Pharm c pte
Dr C H H mphre S ety R B t h Ph m copo l C mm l (l M d l C l Off
L do L l d K gd m (Ch m l)
Dr R Naard P f seur de Ph m e l g e t d M t e méd af à l F t d M d ne d l C
ent d Pa f r nce Memb e l Comm o p m d Cod
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la d Charman Nethe l nds Ph rm cop C mm s n

Dr. May 1 P d Prof s of Ph m c i g y a d Th p t F lity f M f n N c n l
U r s y f m s c o Me D F Ch m C m m t t e e f R f lty M u c n Ph m o p o e
D C A M r e l l D to F d and D s D n D p t m e t f N t f l f h a d W l f a
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 Ch 30 Ill USA

Public Health Section WHO
The report of the committee will be published in JHEH LHO 2 1 T A (R p o S 29

RECENT AND FORTHCOMING MEETINGS

1950

- | | |
|---------------------------|--|
| 1 10 June | WHO Executive Board sixth session Geneva |
| 7 12 August | WHO Expert Committee on School Health Services first session Geneva |
| 28 August
2 September | Joint ILO/WHO Committee on Occupational Hygiene first session Geneva |
| 4-7 September | WHO Regional Committee for the Eastern Mediterranean third session Istanbul |
| 8 9 September | WHO Regional Conference on Statistics Istanbul |
| 11 16 September | WHO Expert Committee on Mental Health, second session Paris |
| 11 16 September | WHO Expert Committee on Tuberculosis fifth session Geneva |
| 22 26 September | WHO Regional Committee for South East Asia third session Kandy Ceylon |
| 23 September
2 October | WHO Expert Committee on Venereal Infections Subcommittee on Serology and Laboratory Aspects second session Paris |
| 25 30 September | WHO Regional Committee for the Americas second session Pan American Sanitary Organization Directing Council fourth meeting Ciudad Trujillo |
| 4 11 October | WHO Expert Committee on Insecticides second session Geneva |
| 9 18 October | WHO Expert Committee on International Epidemiology and Quarantine third session Geneva |
| 30 October
4 November | WHO Expert Committee on the Unification of Pharmacopoeias seventh session Geneva |
| 6-11 November | WHO Expert Advisory Panel on Brucellosis Washington |
| 6 11 November | WHO Expert Committee on Biological Standardization fourth session Geneva |
| 27 November
9 December | WHO Malaria Conference in Equatorial Africa Kampala Uganda |
| December | WHO Expert Committee on Public Health Administration first session Geneva |
| 11 16 December | WHO Expert Committee on Malaria fourth session Kampala Uganda |

1951

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|------------|--|
| 22 January | WHO Executive Board seventh session Geneva |
| 7 May | Fourth World Health Assembly Geneva |

FIG 1 EXPERT COMMITTEE ON THE UNIFICATION OF PHARMACOPOEIAS
SIXTH SESSION



Left to right seated Dr I R Fahmy Professor E Fullerton Cook (Vice Chairman) Dr C H Hampshire (Chairman) Dr H Baggesgaard Rasmussen standing Dr C A Morrell (co opted member) Dr D Mayoral Pardo (co opted member) Dr D van Os Dr H Flück Dr R Hazard P Blanc (WHO)

Members of the committee and co opted members made statements on the probable attitudes of their governments to the first international pharmacopoeia. It is expected that Canada which has as yet no real pharmacopoeia will establish one, probably using the Ph I as a basis. In Denmark a revised edition of the Danish pharmacopoeia has recently been published and the titles and standards of the Ph I will be adopted wherever possible in the addendum now under preparation. Ph I titles and standards will be adopted in the edition of the Egyptian pharmacopoeia which is to appear shortly. The US pharmacopoeia will adopt the titles as titles or synonyms except in cases where proprietary names already exist the international reference standards will continue to be adopted as hitherto in so far as applicable. The new edition of the French Codex will incorporate as many of the Ph I monographs and standards as possible. A second edition of the Mexican pharmacopoeia has just been issued subsequent editions will probably adopt Ph I standards. In the Netherlands the Ph I titles are already in use and the standards will also be adopted as far as possible. The British pharmacopoeia in its next edition will conform to the Ph I except for certain details. The Swiss pharmacopoeia already includes some of the titles and standards in the second supplement to its fifth edition a larger number of these will probably be included in the sixth edition which is being prepared.

The first edition of the Ph I deals chiefly with the drugs most commonly in use and to complement it the publication of an addendum is envisaged for the end of 1951. A great number of meetings during the session were devoted to the examination of some of the two hundred or so monographs to be included in the addendum. These cover the principal antibiotics and new products whose value has been proved. Injections and tablets are included and a table of posology for children so far provided by only very few national pharmacopoeias will be inserted. It is also probable that new methods of analysis such as chromatography, colorimetry, polarography and spectrophotometry will be included.

List of Synonyms

The committee studied a list of synonyms for the drugs included in the Ph I as well as for certain other important drugs and recommended that this list be published at the same time as the Ph I in the form of a supplement to the *Bulletin of the World Health Organization*.

Non Proprietary Names for New Drugs

The general principles relating to the establishment of a system of non proprietary names for drugs as discussed during the preceding session had been communicated to Member States. A considerable number of governments have replied expressing great interest in the plan. In the course of the sixth session the committee endeavoured to work out a mechanism which would make it possible to give non proprietary names to new drugs rapidly if possible before they were available commercially. This question presents difficulties and the committee was of the opinion that no system could be perfect since in all countries a great number of proprietary names already existed. It would be easy therefore to find new non proprietary names which all countries would accept as the common nomenclature. Nevertheless the present situation would be improved and the existing confusion reduced if WHO were to introduce some appropriate mechanism on an international level.

After discussion during which information was given on the methods adopted in various countries for the introduction of non proprietary names the committee proposed the following procedure:

The national pharmacopoeia authorities or any other bodies concerned with the establishment of non proprietary names in the various countries should be requested to notify WHO of important new drugs for which it would be advisable to find common names for national and international use. Drug manufacturers, research laboratories and administrations controlling pharmaceutical products should also be invited to notify either

their own competent authorities or WHO directly with regard to any new products for general use likely to be placed on sale internationally. A subcommittee of three members elected from the Expert Committee on the Unification of Pharmacopoeias should be responsible for decisions concerning names to be used. The name selected would be communicated to Member States and competent national authorities with a recommendation concerning its adoption on the national level.

Control of Drugs

A questionnaire is to be sent to Member States so that a complete documentation may be assembled to enable WHO to supply any information required on the establishment of pharmacopoeias or the control of drugs. The committee specified the points to be included in the questionnaire. These covered regulations in force as to compliance with pharmacopoeial standards, any regulations providing standards for drugs not included in the pharmacopoeia, regulations concerning labelling and advertising, any differences between standards required for drugs manufactured in the country and imported drugs, and regulations with regard to the control and periodical inspection of pharmacies.

CHILD HEALTH

Fourth Session of the Joint Committee on Health Policy, UNICEF/WHO

The Joint Committee on Health Policy of the United Nations International Children's Emergency Fund (UNICEF) and WHO held its fourth session in Geneva on 30 and 31 May 1950¹.

The following is a summary of the decisions reached on the chief items on the agenda.

International Children's Centre

The 1950-1951 programme of the International Children's Centre in Paris (referred to in an earlier number of the *Chronicle*²) was approved in principle by the joint committee. The Director General stated to the committee that he had already given his technical approval for three

¹ For list of participants see page 306.

² *Chron. World Hlth Org.* 1949, 3, 40.

projects concerning a course on social paediatrics the BCG pilot station and immunology research. Among other projects proposed for the Centre which were being studied by WHO preparatory to being given technical approval are those concerning a course on child social psychiatry a course on tuberculosis in children and the question of hospitalization and separation of nursing babies from the family environment.

The social paediatrics course brought together this year 69 fellows and holders from 29 countries. The course on tuberculosis in children which is an innovation is expected to be held towards the end of 1950 and will be given to about 20 participants from various countries. The course on child social psychiatry is also new. It stresses the importance of studying the intellectual and mental development of children from early infancy as well as psychological disturbances and their prevention. In particular this course deals with the latest pedagogical methods factors leading to criminality the role of psychosomatic medicine in paediatrics the care of maladjusted children and the detection of backwardness in school children.

The research section of the Centre is studying two main subjects during this period immunology phenomena during foetal development and problems concerning BCG (BCG Pilot Station). The object of the immunological research is to study the relation of congenital deformities to certain infections of the mother. For example congenital cataract the result of deterioration in the crystalline lens of the eye of the foetus following an attack of rubella in the mother—will be studied experimentally.

The BCG Pilot Station in Paris makes a systematic study of many practical questions on BCG vaccination. It was particularly concerned with the tuberculin and vaccine used by the Joint Enterprise and UNICEF in the mass vaccination campaigns carried out in Europe with products from the Institut Pasteur in Paris and the Statens Seruminstitut in Copenhagen.

Dry BCG vaccine a subject of immediate importance and one on which opinions are divided is also to be studied. The research section will continue its work on the relative effectiveness of crude and purified tuberculin for tuberculin tests new data being continually supplied by tuberculin sampling.

Research work on nutrition and on antipertussis vaccination which comes within the general programme of activities of the Centre will not be undertaken during this first period.

All India Institute of Hygiene and Public Health

The committee considered and approved the proposal for the establishment at the All India Institute of Hygiene and Public Health Calcutta of a maternal and child health section for the training of child health workers. Provision will also be made for 250 fellowships available to students from other countries in the area.

Insecticides

The committee approved of financial aid by UNICEF for the establishment of insecticide manufacturing plants in non producing countries. The use of insecticides in the control of various insect borne diseases is an important factor in the improvement of child health, it is known that mosquito and fly control by insecticides with a residual effect has already resulted in an appreciable decline in infant mortality in many parts of the world.

Antibiotics

The committee approved the allocation of UNICEF funds for improving the production of antibiotics particularly streptomycin crystalline penicillin aureomycin and chloromycetin. Such assistance will make it possible to modernize and extend existing installations to set up new ones and to develop research on antibiotics in selected areas in accordance with the recommendations of the WHO Expert Committee on Antibiotics.

LIST OF PARTICIPANTS

Members

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Mr M Siegel Assistant Director General Administration and Finance

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INCIDENCE OF POLIOMYELITIS, 1947-1949

The world distribution of poliomyelitis and the factors causing epidemic outbreaks of the disease are little known at present. Despite the very extensive literature published during the last fifteen years on the various aspects of poliomyelitis only slight progress has been made as far as knowledge of its epidemiology is concerned. Furthermore when it is remembered that non paralytic poliomyelitis is practically never diagnosed except during epidemics and that even classical poliomyelitis is hardly ever reported in regions with a shortage of physicians it can be seen that the extent of present knowledge concerning the geographical distribution of poliomyelitis is very limited.

The latter observation is of importance since it explains why as shown by the statistics there is a marked lack of balance in the notifications of poliomyelitis from different areas. Thus notifications for Africa in 1949 amount to scarcely half of those for France during the same year. For 1948 the number of reported cases of poliomyelitis for the whole of Central and South America is less than 80% of the notifications for Canada alone.

The last general study of the distribution of poliomyelitis in the world was published in 1947 by K. Stowman in the *Epidemiological and Vital Statistics Report*¹. In a recent issue of the same publication²

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Dr M J Freyche Chief of the Epidemiological Information Section of WHO has dealt with the distribution of poliomyelitis from 1947 to 1949

Europe and USA

As regards poliomyelitis the years 1945 for the USA and 1946 for Europe can be considered as relatively normal. Thus in the USA the number of cases reported for 1945 corresponds to the median number of figures recorded from 1942 to 1948. However in 1946 the number of cases reported—25 191—exceeded by 9,500 and 6 000 respectively, the figures for those years during the period 1926 to 1945 when the endemic level was highest, i.e. the years 1931 and 1944. In 1948 27 667 cases were reported representing a new increase of 10% over 1946. In 1949 there was an unprecedented increase in poliomyelitis in the USA, the number of cases reaching 42 375 an increase of 209% over the median number of cases reported between 1942 and 1948. The incidence of the disease, however varied considerably in the different States.

The 1946 epidemic in the USA was followed by a similar outbreak in Europe in 1947 more than 29 000 cases being registered in the latter year thus exceeding the 1946 figure by 140%. In 1948 the number of cases was 33% less than in 1947 with the exception of a few countries only. From 1948 to 1949 the number of cases rose from 19 622 to 20 374. In 1949 in certain countries France and Iceland for example the figures were the highest recorded in the United Kingdom the figure was the second highest and in Sweden the third highest. In France the 1949 epidemic is considered the most severe in 20 years. It was characterized by the wide dispersion of the cases and the apparent absence of any connexion between them. In England and Wales the 1949 epidemic was after that of 1947, the worst one recorded during the past 25 years. The whole of the country was affected the most pronounced increase being reported in the south west.

Other Areas

The data for the American continent apply mainly to North America. Notifications from other areas are not sufficient for conclusions to be drawn from them and in certain countries they are totally lacking for 1949. In Canada the third highest number of cases was observed in that year.

In Africa the number of poliomyelitis cases notified in 1949 represented only half of those reported for France alone. 80% of the figures come from the Belgian Congo, Kenya, Tanganyika and the Union of South Africa.

The highest figures in Asia were reported by Japan. The other data are too fragmentary and incomplete for any conclusion to be drawn. As

regards India however, Dr N Kezerian who was in charge of a WHO team there³ states that 20% of infirmities among children there can be attributed to poliomyelitis. In New Zealand the second highest number of cases occurred in 1948 the epidemic which had broken out at the end of 1947 continuing until April 1949. In Australia the epidemic appeared later and the incidence in 1949 is considered the highest since 1939.

The causes of the irregular appearance of poliomyelitis in the world and of the epidemic outbreaks will perhaps be explained only after epidemiological and immunological research has been carried out in different parts of the globe. The incidence of cases according to sex age and profession should also be studied.

Ch. n. 11. *Id. High O. g.* 1950 4 63

MORTALITY IN EUROPE

A first contribution to medical statistical documentation on mortality by cause sex and age throughout the world was recently published in the *Epidemiological and Vital Statistics Report*¹ the information is presented in tabular form preceded by explanatory notes by Dr M Pascua Acting Director of the WHO Division of Health Statistics.

These tables give the most recent information available on mortality in a certain number of European countries the data being classified according to cause of death age group and sex. Additional information is also given concerning the number of live births (classified by sex) and the corresponding population figures for the respective countries (classified by sex and by age group). This will make it possible to calculate specific death rates without difficulty.

In his introduction Dr Pascua recalls that the publication of mortality statistics is one of the duties assigned to WHO by its Constitution such publication having been explicitly recommended by the WHO Expert Committee on Health Statistics at its first session in May 1949. This documentation dealing with a few European countries serves to initiate a series which will eventually include all countries throughout the world which can supply similar information on mortality by cause. Furthermore the data available at present will be incorporated in the general study dealing with the evolution of mortality in Europe during the twentieth century the second part of which has just appeared².

The compilation of such data has a twofold interest. These statistics can be of immediate value in the establishment of health programmes by the appropriate administrations. Moreover they will make it possible to appreciate the changes which the various mortality factors undergo in different countries in the course of years, they will offer a unique opportunity for evaluating on an international scale, the evolution of the phenomena which affect mortality rates.

CHEMOTHERAPY OF TRACHOMA

Since shortly after their discovery, the sulfonamides have been used successfully in the treatment of trachoma, today they occupy a leading place in the chemotherapy of this disease. However the antibiotics are becoming increasingly important. the use of aureomycin and chloromycetin in particular has recently been the object of some very interesting work.

What is the place to be assigned today to each of the therapeutic means at the disposal of the ophthalmologist? By what criteria is he to be guided in his choice? To attempt to answer these questions Dr M J Freyche acting Chief of the Epidemiological Information Section of WHO, has just published in the *Bulletin of the World Health Organization*¹ a general study of the treatment of trachoma by sulfonamides and antibiotics, basing his article on the abundant literature which has appeared on this subject.

Even though sulfonamide therapy alone may not effect the absolute cure which certain medical men have claimed it does make possible the control of infectious conjunctivitis which provides a favourable ground for trachoma thus the risk of contagion is reduced. This prophylactic action together with clinical improvements is sufficient to justify the use of sulfonamide therapy in the absence of a truly specific remedy. However the sulfonamides are not always innocuous as is proved by the cases of intolerance which demand a temporary suspension of the treatment or its discontinuance. One of the disadvantages of the sulfonamides is that the dosage which gives the best results in the treatment of trachoma—weak doses administered over a long period—is also the dosage which causes the most trouble. Nevertheless provided certain precautions are taken it is now possible to carry out mass treatment of trachoma by sulfonamides if medical staff and well equipped laboratories are available.

The author points out however that in spite of the numerous successes recorded there are also frequent failures. If the disappearance of hyper

plastic conjunctival lesions is to be taken as the criterion of cure it must be admitted that in 30% to 40% of cases these lesions are only slightly if at all modified by the treatment

After having given the indications advantages and drawbacks of local and oral administration of the sulfonamides Dr Freyche describes their mode of action which is still the subject of much discussion. Some authors consider that these drugs have only a bacteriostatic action on the conjunctival flora and not a specific action on the virus. Clinical observations and experiments on the mouse on the other hand would seem to prove that the sulfonamides act in reality on the etiological agent of trachoma. Recent progress in the culture of the virus may perhaps soon provide the solution to this problem.

The second part of Dr Freyche's study is devoted to the antibiotics. Six commercially prepared antibiotics have been tried in the treatment of trachoma. The results obtained by various workers with thyrothricin are not in agreement. This antibiotic does not appear to be a specifically therapeutic agent but is a good local antiseptic. Gramicidin S has been employed with some success particularly by Russian authors. Penicillin unlike the previously mentioned substances may provoke considerable allergy. On account of the very frequent doses which must be given it is not suitable for mass treatment of the disease and it also may be considered more as an auxiliary drug. Streptomycin which has the disadvantage of being toxic and which has little effect on the virus is a therapeutic agent of secondary value only. Bacitracin does not yet appear to have been tried.

Aureomycin and chloromycetin are of particular interest. The former has been used with some success in Italy Portugal Uganda and the USA. The observations with regard to it are still too limited however to permit drawing definite conclusions. Because of its action against certain viruses and rickettsioses hopes have been raised with regard to chloromycetin. Encouraging experiments have been reported some of which demonstrate that chloromycetin administered orally acts against trachoma. This fact if confirmed will be of considerable importance.

In discussing the value of the observations assembled to date Dr Freyche indicates the main lines of the therapy which ophthalmologists will have to adopt according to the facilities available to them (staff laboratory hospital). A table drawn up in accordance with Bietti's data summarizes present knowledge concerning the action of chemical agents and antibiotics in the treatment of trachoma.

EPIDEMIOLOGY OF Q FEVER

Since the discovery of Q fever by Derrick in 1935, the study of this disease has progressed satisfactorily in spite of its complex nature. In an article published in the *Bulletin of the World Health Organization*,¹ Dr M. M. Sidky, former medical officer of the Epidemiological Studies Section of WHO, distinguishes three distinct phases in the history of Q fever, corresponding to the epidemiological manifestations of the disease in Australia, the USA, and the Mediterranean area.

Australia

In 1935 there were a number of cases of fever among the personnel in a meat works in Brisbane (Queensland). Derrick, after studying the infection, came to the conclusion that it constituted an unidentified nosological entity and proposed that it be called Q fever. Symptoms of the disease were headache and comparatively slow pulse, and it differed from other fevers in that there was no characteristic exanthema. Guinea pigs injected with the blood or urine of patients were receptive to the infection. Later, Burnet and Freeman succeeded in isolating rickettsial bodies in the spleen of mice inoculated with the liver of infected guinea pigs. In addition, specimens of serum from a patient showed an increase in agglutinating titre with a rickettsial suspension. These two findings seemed conclusive evidence of the etiological role of the rickettsia, and the causative organism was named *Rickettsia burneti*.

Since the original epidemic had affected every occupational group in a meat works, the source of infection was sought in livestock and its parasites. Research revealed the existence in the first place of a cycle of infection of which the bandicoot and other wild animals are the reservoir and certain ticks—*Ixodes holocyclus* for example—the vector. Cattle harbour ticks and may be infected by bites. Infection may be transmitted to man directly by tick bites, but it is generally produced by contact with the tissues and organic fluids of the cattle or by inhalation of dust made of tick excreta.

USA

While in Australia clinical studies were made before the search for vectors began, in the USA the pathogenic agent was discovered before cases of fever were observed. In fact, it was in the laboratory that rickettsiae were isolated from ticks. The study of these rickettsiae showed that they

were closely related to those discovered in Australia and for this reason the name of *R. burneti* subsp. *diaporica* was given to them. Most of the cases of fever occurred among laboratory workers among whom the infection was probably caused by inhalation of infected dust. Frequent pulmonary complications were observed.

Mediterranean Area

In the Mediterranean region Q fever which was characterized there also by pulmonary complications was first discovered in the armed forces. Investigation showed that a disease previously classified as atypical pneumonia or "Balkangrippe" was in reality Q fever. The etiological agent *R. burneti*, was not isolated until 1945. It was not possible however to determine with certainty the origin of the infection.

Recent Outbreaks

Q fever has appeared in various parts of the world during recent years. Cases break out not only in laboratories, abattoirs and meat works but also in dairies. Milk would therefore seem to constitute a new source of infection. In fact it has recently been demonstrated that the disease may be transmitted without intervention of parasites by infected cows or goats' milk.

BILHARZIASIS IN THE PACIFIC

Bilharziasis is one of the most widespread diseases in the world. In particular it is endemic in the coastal areas and islands of the Pacific. There are 33 000 000 cases in China, 174 000 in Japan, 250 000 in the Philippines and 1 000 in Celebes. These estimates are given by Dr Willard H. Wright, Chief Laboratory of Tropical Diseases, Microbiological Institute, National Institutes of Health, Bethesda, Md., USA, in an article which recently appeared in the *Bulletin of the World Health Organization*¹. The author gives in tabular form data on the number of infected persons in the various districts of those countries where the disease is prevalent.

Despite its high incidence the importance of bilharziasis as a public health problem has not been sufficiently appreciated. It is frequently overlooked because of the similarity of its symptoms to those of other

diseases, it is often masked by certain other diseases, such as dysentery or nutritional deficiencies

The US armed forces stationed on Leyte in 1944 did not escape scathed 1,700 cases and two deaths were recorded The cost of treatment and hospitalization amounted to \$3 000,000, not to mention losses due to incapacitation

Among native populations, repeated infection gives the disease chronic form Weakened by multiple lesions of the digestive tract, patients often die from intercurrent infections

The snails which act as intermediate hosts for the parasite have been described under many different names However, it would seem that all belong to a single genus *Oncomelania* which includes several species and subspecies Dr Wright's article includes a table giving the names of these snails, the countries where they are found the author describing them, and the corresponding bibliographical references

The last part of Dr Wright's study deals with the control of bilharzias This raises complex problems since in each region agricultural methods, economic conditions and the habits of the people must be taken into account In almost all endemic zones, bilharziasis is predominantly a disease associated with rice farming The use of human excreta for fertilizing the soil contributes to maintaining the infection in China and perhaps in certain parts of Japan It seems unlikely, however, that these habits could be altered In the Philippines the custom of washing clothes and bathing in infested water is an important factor in the transmission of the disease In Japan animals which harbour the parasite (horses goats dogs various rodents) play some part in spreading infection according to certain authors it is possible that oxen and buffalo also help to spread the disease

There are various methods of control including the destruction of schistosome ova in night soil the removal of vegetation from the banks of water-courses and the treatment of infected individuals The author summarizes the results obtained in Japan with these methods and concludes by stressing the efficacy of the procedure he considers to be the best, namely the destruction of snails by chemical means Naturally this operation is not easy everywhere since the ecology of the snails varies according to the region nevertheless research should be aimed in this direction Two recently discovered compounds dinitro-*o*-cyclohexylphenol and one of its derivatives have proved to be very effective not only against snails but also against eggs and cercariae These compounds are very expensive, however and intensive efforts should be made to find a low priced chemical which is not dangerous for man According to the author the solution to the problem of bilharziasis must be sought in this direction

PLAGUE CONTROL IN TARANTO, ITALY, IN 1945

After a respite of about half a century plague reappeared at Taranto in September 1945—a time when the health service of the port was disorganized by war. The administration of some ports was in allied military hands and that of others had been handed back to the civil authorities who were themselves in the course of reorganization after the collapse of the former regime. Under such conditions an epidemic might have had very grave consequences. When the first case of plague appeared the British Army was using the port of Taranto for the evacuation of troops and equipment. During this period sanitary measures were applied by the military services. Later control was handed back to the civil administration and at the same time the Health Division of UNRRA was charged with carrying on the active functions of epidemic control.

In an article which has just appeared in the *Bulletin of the World Health Organization*¹ K. H. Schulz, formerly of the Malaria Section of WHO, describes the course of the epidemic and the deratting campaign which was immediately undertaken.

Twenty nine cases of plague were reported between 6 September and 29 November 1945 and there were 15 deaths. The disease occurred in both its bubonic and septicæmic forms, the latter being 100% fatal. Seven of the 29 persons affected had been vaccinated either two, eight, ten or thirteen days before the appearance of the disease. Three of these vaccinated persons died.

The exact source of infection was never discovered. It is possible that plague had existed for a considerable time in a latent epizootic state in the dock area of the naval arsenal. Rags piled up in a shed in the arsenal were believed responsible, since the first cases were observed among persons who had worked nearby.

The first measures taken by the British Army medical services consisted of cleaning the suspect shed, DDT spraying and deratting by means of baits poisoned with barium carbonate or red squill onion. A DDT zone was laid down around the danger area, spraying extending to a depth of two or three blocks, and DDT dusting centres were installed in neighbouring districts. These measures were followed by a general campaign against rodents undertaken with the collaboration of UNRRA.

The author describes in detail the three cycles of the deratting campaign—carried out by means of baits containing zinc phosphide and arsenious oxide—which lasted until the spring of 1946. The whole of the town and port of Taranto was covered, an area of 7 square kilometres with a population of about 185 000. More than 5 000 rats were destroyed, none of the 300 rodents examined was carrying plague bacilli.

In concluding his article the author suggests that this successful campaign might well serve as a model for antirodent campaigns to undertaken throughout Italy, particularly in the ports

DDT AND SANDBLIES

Anti anopheline campaigns using residual DDT have resulted in the destruction of other insects which are intermediate hosts or vectors of human parasites. It has been noticed for several years in Greece that the number of sandflies—which transmit sandfly fever and leishmaniasis—considerably smaller after spraying. Mr Marshall Hertig of the Gorga Memorial Laboratory, Panama, took part in a survey organized in Greece by the Interim Commission of the World Health Organization and the WHO mission in 1948 to determine the effect on sandflies of DDT spraying campaigns against mosquitos. In an article in the *Bulletin of the World Health Organization*¹ he has summarized the results of observations made in Athens and its suburbs in certain villages of Attica and in Canea Crete. His investigations also extended to Italy and Sicily. Mr Hertig concludes that spraying the interiors of dwellings with residual DDT ensures immediate and almost complete protection against sandflies. By repeating the spraying every year at the time these insects hatch their number can be reduced almost to the vanishing point.

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DETERMINATION OF SMALL AMOUNTS OF RESIDUAL DDT

In a recent article in the *Bulletin of the World Health Organization*¹ Professor Maria E. Alessandrini of the Istituto Superiore di Sanità, Rome, describes a rapid and fairly sensitive method for the detection and determination of small amounts of DDT on sprayed surfaces. This colorimetric method, which is a modification of that devised by Schechter, Solovay, Hayes & Haller, can be easily used even in the field and with limited equipment. By means of a colour scale, amounts of DDT between 0.0001 g and 0.005 g can be directly estimated according to the colourations obtained. The author explains the advantages and limitations of the method and

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summarizes observations made during the thousands of analyses carried out over two years in various parts of Italy especially in Sardinia the Pontine marshes and Sicily

SERODIAGNOSIS OF THE TYPHUS GROUP OF FEVERS

Standardization of Tests

Thanks to recent methods for the culture of rickettsiae on the chick embryo suspensions suitable for the serological diagnosis of infections of the typhus fever group are now available. In this way it has been possible to distinguish between different types of fevers belonging to this group which give analogous reactions to the *Proteus* OX antigens and which consequently cannot be differentiated by the Weil Felix test. At the same time tests carried out with rickettsial suspensions have their limitations and may lead to erroneous conclusions. It would therefore appear desirable to combine the use of these two sets of tests and to employ each of them according to its relative usefulness.

These considerations introduce a note submitted to the WHO Expert Committee on Biological Standardization by Dr A. Felix, Director of the Central Enteric Reference Laboratory and Bureau, London, and published in the *Bulletin of the World Health Organization*¹. The author reviews the advantages and disadvantages of the two types of antigens (rickettsiae and strains of *Proteus* OX). He comes to the conclusion that, contrary to the opinion of certain workers, rickettsial suspensions cannot at present replace *Proteus* OX antigens for carrying out routine tests. They are destined to supplement rather than to supplant them. Furthermore, it is not correct to say that tests made with rickettsiae are specific, whereas those employing *Proteus* OX are not.

On various sides the need has arisen for standardizing the materials and methods used in serological tests for the diagnosis of the rickettsiae, whether of the complement fixation, rickettsial agglutination, or Weil Felix type. The standardization of these methods presupposes the adoption of "international serum standards."

In the second part of his note, Dr Felix examines the question of international serum standards for *Proteus* OX agglutination tests. The author suggests the adoption of "standard agglutinating sera" for the agglutinations occurring in the presence of *Proteus* OX19, *Proteus* OX2, and *Proteus*

OVK These sera could be prepared on a large scale in horses, using as immunizing material the alkali stable O antigens of the corresponding *Proteus* X strains

DIAGNOSIS OF TYPHOID AND PARATYPHOID A AND B FEVERS

Standardization of Agglutination Tests

The agglutination tests employed in the diagnosis of typhoid and paratyphoid fevers will continue to be used for a very long time despite the advances made in other respects in techniques for isolating the bacilli. Moreover, these tests remain indispensable in epidemiological research for the detection of inapparent infections and of germ-carriers. Thus the question of their standardization is still of considerable importance at the present time.

In an article published in the *Bulletin of the World Health Organization*,¹ Dr A. Felix discusses various methods used for carrying out these tests. He then traces the history of the standardization of the Vi agglutination test by means of the provisional standard serum and stresses the success of this method. In the last part of his article the author approaches the problem of establishing serum standards for the H, O, and Vi agglutination tests. It would probably be possible to standardize the H and O agglutination tests in a manner analogous to that used for the Vi agglutination tests. The first step would consist of adopting international serum standards for the determination of the H and O agglutinins. 'Standard agglutinating sera' could be prepared for typhoid H agglutination, paratyphoid A H agglutination, paratyphoid B specific H agglutination, paratyphoid B non specific H agglutination, typhoid O agglutination, paratyphoid A O agglutination, paratyphoid B O agglutination, typhoid Vi agglutination.

Co operative research under the auspices of WHO should then make it possible to find out by examination of these eight sera in laboratories all over the world if they are suitable for use as international standards.

STANDARDIZATION OF LIVER EXTRACTS

The increasing use of preparations based on liver extracts for the treatment of pernicious anaemia necessitates the setting up of an international reference standard for assaying the potency of these products. The WHO Expert Committee on Biological Standardization dealt with this question during its third session¹. A note on this subject submitted to the committee by Dr E. Lester Smith has just been published in the *Bulletin of the World Health Organization*.

The author mentions the three methods which can be used for the assaying of liver extracts: the clinical method for determining the potency of the preparations in the patient; the biological method making use of an experimental animal; and finally the microbiological method which, as it is simpler and more accurate, is tending to supplant the preceding ones.

The microbiological method consists in evaluating the potency of various substances by the action they have on cultures of micro organisms. For the assay of liver extracts, Dr Smith suggests the technique applied in the case of vitamin B₁₂, *Lactobacillus lactis* Dörner being chosen as the test organism. The author gives some details regarding this technique.

The microbiological method may readily be employed in routine practice. However, some reservations must be made as concerns the interpretation of the results. The majority of the micro organisms utilized react not only to vitamin B₁₂ but also to other growth factors which may be present in liver extracts. This becomes of particular importance in the case of organisms which are sensitive to the action of thymidine or to that of other substances which are clinically inactive. Research has been undertaken with the aim of modifying this technique and introducing chromatography on paper before the microbiological test.

The second part of the note deals with the problem of the standard preparation. The author favours the adoption of pure crystalline vitamin B₁₂ as standard in preference to liver extracts themselves. This choice would have the advantage, among others, of making it possible to express the potency of the standard preparation as a weight of crystalline vitamin B₁₂, thus avoiding the use of arbitrary units. However, certain difficulties arise: at present only extremely small quantities of vitamin B₁₂ are available and the stability of this substance still needs to be tested. The author suggests means of overcoming these two disadvantages.

¹ W. H. A. O. G. T. Ch. R. P. S. 1950, 2, sec. Two Ch. II. W. H. A. O. G. 1949, 3, 141.
B. U. W. H. A. O. G. 1950, 2, 651.

ANTIGENS IN SERODIAGNOSIS OF SYPHILIS

The discovery of cardiolipin antigens has given rise to renewed interest in serodiagnostic tests for syphilis. Comparison of the new with the old antigens has formed the subject of numerous papers and several workers have recently shown the superiority of the new techniques. The results of investigations carried out by Dr A. Bekierkunst of the Dermato-venerological Clinic, University of Wrocław (Poland) and Dr F. Milgrom of the Institute of Medical Microbiology, Warsaw, who have compared the complement fixation reaction using cardiolipin antigens, with the Kahn reaction, have just been published in the *Bulletin of the World Health Organization*¹.

The two tests were applied to 260 sera taken from 240 patients suffering from syphilis and from 20 cases of suspected syphilis. The complement fixation test was positive in 88.1% of cases while the Kahn test gave 86.2% positive results. These figures, which are confirmed by other results, lead the authors to the conclusion that the complement fixation test utilizing cardiolipin antigen is at least as sensitive and specific as the Kahn test.

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PSYCHIATRIC EXAMINATION OF OFFENDERS

The conviction of an offender is intended to exercise retributive justice, to deter others from committing crimes and to reform the criminal himself. Does it actually achieve these aims? It is difficult to say. The number of crimes at present taking place in the world does not justify the belief that the methods of criminal justice employed have any very considerable preventive influence, nor that present methods for the treatment of crime bring about the reformation of the criminal. The development of medical science, sociology and psychology during the first half of the twentieth century has made a significant contribution to the better understanding of offenders and their acts. Intuition and empiricism are gradually being replaced among jurists by the application of scientific principles. However, because of the already crowded curricula of law schools, judges and other persons responsible for the enforcement of criminal laws are without adequate training in the medical and behaviouristic sciences.

These are the preliminary observations made by Dr M. S. Guttmacher, Chief Medical Officer of the Supreme Bench of Baltimore, Md., USA, in

an article recently published in the *Bulletin of the World Health Organization*¹ The author describes a plan for setting up scientific legal institutes for the scientific examination of offenders prior to sentence

Such a scientific legal institute would comprise three divisions social psychiatric and medical The social division would be responsible for compiling socio medical records of the case histories of the offenders such records would be placed at the disposal of the authorities concerned Furthermore this division could provide through social workers a supervisory and aid service capable of playing an important part in preventing crimes The psychiatric division would be concerned particularly with the examination of young offenders and of accused or convicted persons at the request of the court jury public prosecutor or counsel The medical division would have the task of giving advice on medical problems (examination of injuries determination of blood groups autopsies etc) to the court and its agents

After describing the functions of these three divisions in detail the author concludes by stressing that one of the duties of the scientific legal institute would be training legal personnel in the application of social and medical sciences to criminal justice Dr Guttmacher believes that despite the variety of legal systems throughout the world the fundamental principles which he recommends could after suitable adaptation to the systems of different countries be widely applied

The paper which has been briefly summarized here was presented to the World Health Organization in the form of a report entitled Plan for the scientific examination of offenders prior to sentence for submission to the Social Commission of the United Nations The Expert Committee on Mental Health examined this report during its first session and is in entire agreement with the general principles put forward in this proposal

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Reports from WHO Fellows

Many of the letters and reports received from WHO Fellows have been of such interest that they deserve to be read by a wider public. They demonstrate more vividly than a series of facts and figures both character of the fellowship programme and the response of the Fellows themselves. Selections from these reports have therefore been published from time to time but it must be emphasized that the opinions expressed are those of the Fellows.

Mexican National Institute of Cardiology

Dr H. Chevalier, médecin-assistant des hôpitaux de Paris and formerly chief of the cardiology clinic at the Faculty of Medicine has been studying the working methods of the National Institute of Cardiology in Mexico and visiting several cardiology centres in the USA. Dr Chevalier describes in his report the organization of the Institute directed by Professor I. Chave, the activities of which include scientific cardiological research as well as clinical work and teaching.

The Mexican National Institute of Cardiology examines more than 25 000 people annually. It has a hospital section of 120 beds divided among four separate services (men women children surgery). Although its principal activities are concerned with the diagnosis and treatment of cardiovascular diseases, the Institute is also a centre of scientific research and teaching. The latter covers complete courses of preparatory study for the diploma of Doctor in cardiology and also separate advanced courses of short duration in such subjects as electrocardiography. The Institute possesses considerable technical equipment for the conduct of these courses and comprises the following departments: electrocardiography and phonocardiography, radiology and angiocardiology, haemodynamics, haematology, biochemistry, bacteriology, anatomopathology, biostatistics and rheumatology. The electrocardiography department alone has four doctors, two internes, three technicians and a secretary. The department of experimental physiology, which is part of the Institute although housed in a separate building, includes twelve research workers. Approximately one third of the annual budget of the Institute is allocated to research work.

Dr Chevalier studied the organization of the Institute as a whole and in particular that of the modern electrocardiography section. A course in this subject includes theoretical and practical training (reading of hundreds of electrocardiographic recordings) and experimental work. Dr Chevalier took part especially in experimental research on septal activation, coronary phlebitis and septic pericarditis in the dog. He also observed experiments with a new cardiotonic drug and with techniques for the exact calculation of the refractory period in auricular and ventricular and other forms of myocardia.

Members of all departments meet together periodically for the discussion of problems. Sessions are held on clinical anatomy and haemodynamics and on surgical medicine—at which the implications of cardiovascular surgery are studied.

In the USA, Dr Chevalier visited the cardiology laboratory of Tulane Medical School and the physiology laboratories of Louisiana University, New Orleans; the cardiology department of Bellevue Hospital, New York University; and Dr Paul D. White's department at the Massachusetts General Hospital, Boston.

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the joint assistance of WHO and the American Lutheran Service Committee. The team gave courses throughout the country and demonstrated some of the latest techniques in medicine and surgery. The team provided medical equipment and literature to public scientific centres and medical schools.

Provision had been made in 1950 for supplies, equipment, and staff for a tuberculosis training centre in Wrocław and a venereal disease control training centre in Warsaw.

Manual for Tuberculosis Control Workers

A *Manual of Information for Workers of Tuberculosis Control Centres in China* has been prepared by WHO consultants in China, and copies in the English and Chinese languages are now available. This manual gives a comprehensive account of modern methods adopted in the control of tuberculosis, with particular reference to mass chest surveys and BCG vaccination and deals in detail with the responsibility and activity of the tuberculosis control worker. It will be specially useful to workers in countries with undeveloped control programmes.

The manual was prepared by Dr I. M. Lourie, Tuberculosis Consultant and Miss A. L. Eggestein, Nurse Consultant, both formerly with the WHO mission in China.

Spanish and French Editions of the Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death

Volume I of the *Manual de la Clasificación Estadística Internacional de Enfermedades, Traumatismos y Causas de Defunción* is now available. This is the first publication of its kind in Spanish and represents a significant contribution to the improvement of comparability of medical statistics, especially since the *Manual* will be used as such by many of the Spanish speaking countries rather than merely as a basis for the preparation of national manuals.

Volume I of the *Manuel de Classement Statistique International des Maladies, Traumatismes et Causes de Décès* has also been published.

The *Manual* provides for the first time a single list for coding both diseases and causes of death and in addition includes an extensive Tabular List of Inclusions which gives diagnostic terms defining the content of each category of the list and a comprehensive Alphabetical Index. Also included are WHO Regulations No. 1 regarding nomenclature with respect to diseases and causes of death as adopted by the First World Health Assembly and put into force on 1 January 1950.

Volume I of the English edition of the *Manual* was published in 1948* and Volume II, the alphabetical index, appeared in 1949. The two volumes of the *Manual* are available at a price of \$6.00.

Ch. World Hlth. Org. 1948 2: 158

Ch. on W. Hlth. Org. 1950 4: 154

Chr. W. Hlth. Org. 1949 3: 17

in public health administration. In 1943 he was appointed Directeur de la Santé à Annam and restored the health services which had been disorganized by bombing and blockade and under conditions made difficult by lack of drugs and supplies during the campaigns against serious epidemics of typhus and plague in the Haute Région. epidemic outbreaks of malaria. Interned in 1945 by the Japanese he organized services and campaigns to control cholera and diphtheria in the concentration of Hue. After the liberation he resumed his post of Directeur de la Santé de l'Indochine but was later asked to take over direction of the Service de la Santé publique du Commissariat de France.

Dr Dorolle has taken part in a number of missions in equatorial Africa, India and Java. Since the end of the war he has participated in several international conferences on food hygiene at Singapore, Baguio, Bangkok and Rangoon. In 1950 he was a member of the French delegation to the Third World Health Assembly.

Dr Dorolle is the author of a number of works on the pathology of tropical diseases: *tropical syphilis and its nervous and cerebral complications*, *epidemiology*, *rural sanitation*, *forensic medicine* and *food hygiene*, with special reference to Indochina area where he conducted the first systematic investigations on nutrition. In recognition of these works Dr Dorolle was elected to membership of the Société Pathologie exotique in Paris in 1936. He is also a corresponding member of the Ec française d'Extrême Orient.

Dr Dorolle has received the decorations of the Légion d'Honneur, the Croix Guerre avec palme and the Médaille d'argent des Epidémies. In addition he has received high honours conferred upon him by the Governments of Cambodia, Laos and Viet Nam.

Poland Decides to Withdraw from WHO

H E Julian Przybos, Minister of Poland in Bern, has informed Dr Brock Chisholm, Director General of WHO, of his Government's decision to withdraw from the World Health Organization.

In his letter dated 15 August 1950 the Minister asserts that WHO has given up of its lack of faith in the principles which should guide its work, as well as of its complete surrender to the imperialistic States, and in particular to the United States, and states that the Government of the Republic of Poland declines to take any responsibility for the orientation of the activities of WHO and for their submission to the imperialistic policy of the powers preparing a new war.

As a war devastated country Poland has received many forms of assistance from WHO. A medical liaison officer was maintained in Poland until the autumn of 1949 to advise the national health administration and to arrange for WHO services¹. Poland received technical aid from WHO in its nationwide campaign against venereal diseases and was assisted in the organization of a tuberculosis control scheme². WHO participated in the BCG vaccination campaign in Poland³. A consultant visited Poland to advise workers on streptomycin therapy and to work out a uniform scheme of reporting results and a consultant on x-ray technology conducted demonstrations and assisted in the publication of a manual on x-ray techniques⁴. Of a total of 800 fellowships awarded by WHO, 119 were received by Polish physicians. \$26 000 was made available for this purpose for 1950.

Other assistance included the supply of medical literature. So far Poland has received 704 medical books, 95 microfilms and subscriptions or renewals to 241 periodicals. A medical team composed of specialists from various countries visited Poland under

Ch on World Hlth Org 1947 1 74, 1948 2 30, 1949 3 29, 85, 1950 4 13
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Ch on Wld Hlth Org 1948 2 66

which are harmful to the healthy psychological development of individuals

So far so good. WHO at least seems to recognise the place and importance of the medical officer of health. But when the report goes on to consider the practical steps involved, a much less satisfactory picture is presented. What after all is mental health? WHO admits that there is no constant measure of it because it varies with the cultural patterns of racial and national groups and among different sections within them. No attempt is made here to indicate a basic design for healthy mental living for Everyman and how he should be able at least and in

general to attain content and often or sometimes happiness and joy.

The trouble with the cultural shoots of the United Nations is that all they are predominantly Western. They have so little use for the traditional wisdom of the West. Indeed the pattern of conduct and attitude to the world that leads to integration of personality are to be found in recognisable form everywhere, their witness borne by the philosophers and prophets of all peoples. Let WHO fairly tackle the problem of what are the essentials of mental health and then we shall be better able to devise the administrative procedures necessary to foster their growth.

Views on WHO

Challenge of Malnutrition

An editorial in the FAO European Bulletin *Food and Agriculture* (1949 2 79) emphasizes the importance of nutrition in the WHO programme and the need for a close co operation between these two specialized agencies of the United Nations

"While the great need for curative treatment is today still a tacit admission of the failure so far in many respects of Preventive Medicine it has been refreshing to observe how WHO as the torchbearer for the coming New Order in Medicine is not only laying more and more emphasis on Prevention but feels that even Prevention is still too negative a view and that public health services should become *promotive* (nothing less than that) and that as soon as the exceptionally bad disease areas in the world are under control the necessary shift of emphasis from disease to health and the factors that promote it will readily come to pass

As FAO's strongest and most necessary link with WHO will probably always be in the field of nutrition and food production FAO would like to believe that in WHO's very appropriate definition of health as a state of complete physical mental and social well being and not merely the absence of disease or infirmity the need for proper nutrition is a basic conditional factor to it all was so strongly implied that it required no special mention that Nutrition the stone discarded by the builders will in the New Order in Medicine become an important foundation stone

Jointly it is hoped our two Organizations will see in our two most important enemies Malnutrition and Disease not the struggle but a CHALLENGE to prove to the world that a programme of better nutrition is less costly than one involving the dealing with people who are weak or diseased unhappy and unproductive that reckoned in terms of low vitality impaired efficiency actual sickness and hospitalization malnutrition is a tax which no nation on earth—not even the United Nations—can go on paying

Mental Health

In connexion with the first report of the WHO Expert Committee on Mental Health the *Medical Officer* London (1950 83 249) comments

We are increasingly hearing about mental health in these days One reason for it may be the greater incidence or at least ascertainment of frank psychiatric illness Another may be the emergence of the concept of psychosomatic medicine while yet a third and perhaps the most important is the recognition that human society both in this country and generally is in a profoundly unstable state That the medical officer of health is involved in this question is undisputed though where he stands relative to it is more obscure His statutory duties are limited to ascertainment and disposal his permissive power to the care and after-care of the psychiatric sick or convalescent within the community while his wider interest is with the prevention of mental as of organic disease and the preservation of total health The subject is complex and difficult

The World Health Organisation has rightly enough entered this field and the Report on the First Session of the Expert Committee on Mental Health lies before us The opinion here unequivocally expressed is that preventive work is in urgent need of development and extension and that the medical officer of health is the proper person to undertake it as an ordinary part of his duties If necessary he should receive further training to equip him to provide in the words of the report the generalship for preventive mental health work He will control a team of which the most valued member is likely to be the public health nurse another addition he may reflect to the already onerous burden of the health visitor The suggestion is not that he be turned into a psychiatrist but rather that he should concern himself to quote the report again with the recognition and eradication of factors in the community

which are harmful to the healthy psychological development of individuals

So far so good. WHO at least seems to recognise the place and importance of the medical officer of health. But when the report goes on to consider the practical steps involved a much less satisfactory picture is presented. What after all is mental health? WHO admits that there is no constant measure of it because it varies with the cultural patterns of racial and national groups and among different sections within them. No attempt is made here to indicate a basic design for healthy mental living for Everyman and how he should be able at least and in

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The trouble with the blueprints of the United Nations is that if all they are predominantly Western they have so little use for the traditional ideas of the West. Indeed the pattern of conduct and attitude to the world that facilitate integration of personality are to be found in recognisable form everywhere their witness borne by the philosophers and prophets of all peoples. Let WHO fairly tackle the problem of what are the essentials of mental health and then it will be better able to devise the administrative procedures necessary to foster their growth.

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Bulletin of the World Health Organization, Supplement 1

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RECENT AND FORTHCOMING MEETINGS

1950

4-11 October	WHO Expert Committee on Insecticides second session Geneva
9-15 October	WHO Expert Committee on International Epidemiology and Quarantine third session Geneva
30 October 4 November	WHO Expert Committee on the Unification of Pharmacopoeias seventh session Geneva
1-6 November	WHO Expert Committee on International Epidemiology and Quarantine Legal Subcommittee third session Geneva
6-7 November	WHO Expert Committee on the Unification of Pharmacopoeias Subcommittee on Non-Proprietary Names first session Geneva
6-11 November	WHO Expert Committee on Biological Standardization fourth session Geneva
6-14 November	WHO/FAO Expert Advisory Panel on Brucellosis first session Washington
27 November 9 December	Commission for Technical Co-operation in Africa WHO Malina Conference in Equatorial Africa Kampala Uganda
December	Meeting of Experts of WHO Advisory Panel on Public Health Administration Geneva
11-16 December	WHO Expert Committee on Malaria fourth session Kampala Uganda
11-16 December	WHO Expert Committee on Mental Health Subcommittee on Alcoholism first session Geneva
11-16 December	WHO/FAO Consultant Group on Bovine Tuberculosis and Other Zoonoses first session Geneva

1951

22 January	WHO Executive Board seventh session Geneva
April tentatively	WHO Expert Committee on International Epidemiology and Quarantine fourth session Geneva
April	WHO Expert Committee on the Unification of Pharmacopoeias eighth session Geneva
April	Joint FAO/WHO Expert Committee on Nutrition second session Rome
9 April	WHO Special Committee to consider the Draft International Sanitary Regulations prepared by the Expert Committee on International Epidemiology and Quarantine Geneva
April or May tentatively	WHO Expert Committee on International Epidemiology and Quarantine Legal Subcommittee fourth session Geneva
7 May	Fourth World Health Assembly Geneva

WHO TUBERCULOSIS RESEARCH OFFICE, COPENHAGEN

The WHO Tuberculosis Research Office was established in February 1949 to study the problems of tuberculosis particularly in connexion with mass BCG vaccination. During the past 20 months its work has been extended to many countries participating in the BCG campaign and in a number of countries research projects have been developed in co operation with national or local health organizations. Special mention should be made of the close co operation with the Joint Enterprise for the international BCG-campaign, the Statens Seruminstitut and the National Health Service of Denmark.

The activities of the Research Office can be divided into four major categories

1 *Direction of statistical work of the BCG campaign and preparation of material for documentation*

From the beginning of the campaign it was recognized that there would be a most unusual opportunity for worldwide collection of useful information on tuberculin sensitivity and that a statistical report of the vaccination and the results of tuberculin testing in each country would be best prepared by a central office as a permanent record for international comparison and follow up. A statistical section for the BCG campaign was set up in the Research Office to perform the following functions

(a) Direction and supervision of the statistical work of the campaign in individual countries. A detailed statistical manual has been issued for use in the field.

(b) Training of statisticians for field assignments and training and supervision of national and local statistical personnel.

(c) Preparation of monthly, annual and final reports for individual countries. The final report for the campaign in Czechoslovakia was recently published and the preparation of several others is well under way. Tuberculin sensitivity curves by age were issued for 12 countries in the campaign.

By the end of September 1950 the Research Office received from the field detailed statistics on tuberculin testing of 16 289 586 persons and vaccination of 8 136 857 non reactors representing respectively about 55% of the tested and 60% of the vaccinated in the campaign. At the time of writing this report statisticians or trained statistical supervisors were working in Austria, Ecuador, Egypt, Greece, India, Mexico and Syria.

In February 1950 a special statistical office was set up in Vienna in co operation with the Austrian Ministry of Social Welfare for collection of statistical data from the campaign. To date 350 000 vaccination records

have been transferred onto punch cards. Statistics on tuberculin testing and vaccination, including post vaccination retesting, are being tabulated.

Lately, arrangements for making a sampling survey of post vaccination allergy in Greece were made. Retesting by specially trained teams has begun in the schools in Athens. Emphasis is placed on determining the duration of tuberculin allergy and variations which may have resulted from different lots of BCG used.

2 *Evaluation of effect of mass BCG vaccination on prevention of tuberculosis*

The Research Office has, from the start, stressed the importance of a controlled study in the evaluation of the effect of BCG vaccination on a population of a sufficient size, in which the non reactors are vaccinated alternately at random, it proposed that such a study be undertaken along with the present BCG programme. So far this idea has not met with success because health authorities find it difficult to subject populations to such experiments.

An evaluation project of a different kind has been developed in Finland. Punch card copies of about one million vaccination records have been made to form a national roster. This will permit direct matching of current death reports from the National Office of Vital Statistics, and observed tuberculosis mortality of the vaccinated can be compared with that of the natural reactors to tuberculin and with expected trends of tuberculosis mortality in the general population based on pre vaccination experiences. Supplementing this central roster a detailed analysis has been made of the Finnish mortality from tuberculosis, in order to work out forecasts for comparison with observed mortality rates in years to come.

Finland has certain special features which are favourable for the project in question. Vaccination was quite complete and was carried out in a relatively short period of time, about one and a half years in 1948-1949. There is a strong centralized organization for tuberculosis control, and its leaders are interested in international collaboration in tuberculosis research. The Finnish tuberculosis mortality is comparatively high—130 per 100 000—and mortality statistics are available for a long period of years. If the effect of mass BCG vaccination on tuberculosis mortality can be demonstrated at all without a comparable control group, it should be possible under the conditions obtaining in Finland.

A similar roster is being set up in Denmark, at the request of the Danish National Health Service for the National Tuberculosis Mass Campaign, which aims at a complete examination of a population of 1,400 000 between the ages of 1-6 and 15-34 by tuberculin testing and vaccination as well as x-ray examination of adolescents and adults. Denmark has the lowest mortality in tuberculosis among nations, 19 per 100 000 in 1949. Its tuberculosis control is outstanding. Local tuberculosis dispensaries are usually under the charge of specialists of high standard. Diagnosis is

FIG 1 TUBERCULIN TESTING IN INDIA



Dr C E Palmer Director of the WHO Tuberculosis Research Office performing a tuberculin test during his visit to India

proved by bacteriological findings a single national laboratory being responsible for the work. Registration of tuberculosis morbidity and mortality is as complete as is practically possible. The country is small and a national roster of the tuberculin tested and the vaccinated is of reasonable manageability. The programme is especially suitable for the study of the effect of the BCG vaccination on tuberculosis morbidity.

3 *Studies on BCG vaccine and techniques of tuberculin testing and vaccination*

Since November 1949 a series of investigations has been carried out as a co operative undertaking with the Joint Enterprise and the Danish Statens Serum Institut to develop methods for field study and comparison of BCG vaccines and to elicit the effects of certain factors on the allergy producing quality of the vaccine. In these studies great care has been directed towards securing adequate comparability of test subjects, uniformity of techniques and procedures, accuracy of observation and measurement and avoidance of personal bias. The test individuals are exclusively school children of 7-14 years of age living in rural districts where the prevalence

of tuberculous infection is very low. Not only are uniform techniques and procedures maintained throughout these studies, but the same operations are performed as far as is practically possible by the same individuals. All vaccines used are labelled in a code, and their identities are not known to the field staff who do the testing and vaccination. Readings of tests are recorded by clerks so that the reader has neither the necessity nor the opportunity to obtain any information on the individual record.

Results to date indicate that the age of the vaccine, the storage temperature and, within the limits studied, the dosage of vaccine effect only slight differences in the allergy producing quality of the vaccine used. Essentially all vaccinated children have become reactors 8-10 weeks after vaccination, so far as the usual criteria of the size of a positive reaction are accepted.

There are, however, small differences in the character of the reactions, which are strongest in children vaccinated with vaccine four times the standard strength and weakest in those receiving fractional strengths. The striking finding is that there is no significant decrease in the average size of reactions with the increasing age of vaccine up to 29 days, both with refrigerated vaccine and with vaccine stored at 20°C. Even storage at 37°C for five days did not disturb the effectiveness of the vaccine in producing tuberculin allergy.

Differences between vaccines from different production centres are apparent with respect to the total spectra of tuberculin sensitivity which are not only quantitative but qualitative as well. It seems that the size of the post vaccination tuberculin reaction differs less markedly for the different vaccines than the qualitative character of the induration they produce.

So far seven projects have been carried out on a total of about 15,000 children and the retesting of the last group will be made shortly. The first of a series of papers from these studies has recently been published in the *Bulletin of the World Health Organization*¹.

As there is much need for more precise and quantitative methods for field standardization and comparison of tuberculins plans have been worked out for the development of such methodology through utilization of the facilities of the Danish national tuberculosis campaign and the special vaccine studies. Pilot studies are also being planned to standardize a new lot of tuberculin for use in the international BCG campaign and for comparison with other tuberculins.

4. Special research in different areas and peoples

The study of the specificity of the tuberculin test and the significance of the non specific reactions is basic to many clinical and epidemiological

¹ B II World Health Org 1950 3 1

problems and to the proper performance of BCG vaccination. A special research team was in India for six months from September 1949 and has been in Egypt since April 1950 making observations on the tuberculin test with different antigens in varying dosages. About 40 000 persons have been tested and BCG vaccination x ray examination and post vaccination retesting have been carried out on selected groups.

A similar study has been made in Iceland in co operation with the tuberculosis control service in that country. Approximately 2 000 persons have been tested using avian BCG and other tuberculins. It is hoped that the work will be extended to include epidemiological studies on factors influencing the rapid decline in the incidence of tuberculosis where BCG vaccine has not been extensively used as a prophylactic.

A field station was established this spring in Madanapalle South India in co operation with the Union Mission Tuberculosis Sanatorium to study tuberculosis in rural India and to investigate problems which have arisen in connexion with the mass BCG vaccination being carried on in that country. In 1948 1949 the entire population of 14 000 in Madanapalle town were x rayed tuberculin tested and vaccinated. The present programme includes retesting and revaccination and extension of mass BCG vaccination x ray examination and follow up in surrounding rural communities. In one area the examination of 4 000 persons was recently completed and basic information has been put on punch cards for tabulation and analysis.

TUBERCULOSIS CONTROL

During its fifth session held in Geneva from 11 to 16 September 1950 the Expert Committee on Tuberculosis¹ discussed in particular the role and responsibilities of the general hospital in the diagnosis and treatment of tuberculosis mass radiography the report of the WHO Tuberculosis Research Office in Copenhagen compulsory notification of tuberculosis and bovine tuberculosis.

The following took part in the session

Members
 D. M. S. Aba Bey Adise M. W. Avi g & Sp. g. Co. Cair. Egypt (Fac. Ch. m.)
 Dr. J. Baldó Ch. f. T. bercul. is D. is M. try of H. th and Social W. if re C. Ven zu l
 Dr. P. V. Be j m n T. bere l. Ad. se D. t t G. l f H. lth Service N. w Delb. I d a
 Dr. E. B. m. d. Pr. fes. à la F. lité d. Médec. d. l U. rs té d. P. F.
 Dr. P. M. d. Arty H. rt. D. rect. Med. I. R. se. rch. Co. l. T. be. c. l. is Res. rch. U. t. Lo. d. n.
 Unit d. Kl. gd. om.
 Dr. H. E. Hill boe. Commiss. f. H. alth. New York State Dep. rtme. t. of H. alth. Alba. y. N. Y.
 USA (R. ppo. t.)
 Dr. J. H. Holm Ch. f. T. bere l. D. St. t. Serum. t. t. C. pe. h. ge. De. mark (Chair man)
 Sec. ry
 Dr. J. B. M. Do. g. l. Ch. f. T. bere l. os. Sect. WHO

Role and Responsibilities of General Hospitals²

General hospitals could make an important contribution to tuberculosis control by subjecting admissions, outpatients, and hospital staff to radiographic examination. It would thus be possible to detect unsuspected cases which might spread infection in the general service wards and among the unprotected hospital personnel. This method of case finding has thus far, not been used to any great extent. Recent inquiries in the USA have revealed that only about 247 of 4 539 general hospitals have adopted such routine chest examinations despite the fact that the effectiveness of this practice has been amply demonstrated. In a hospital in New York State for example, 74% (i.e., 7,187) of the patients were radiographed and 4% (i.e., 290) showed signs of tuberculosis. In the Chicago University dispensaries fluoroscopy of the chest has been routine practice since 1942, of 15,000 persons examined, 4.17% (i.e., 626) have shown tuberculous lesions. From these figures and from a previous study carried out in Chicago on 25,000 negroes, it has been estimated that in the USA 600,000 persons undergoing medical treatment for other complaints are suffering from undiagnosed, active tuberculosis.

In most countries the number of beds in tuberculosis sanatoria and specialized hospitals is insufficient. This situation could be relieved by admitting cases of tuberculosis to general hospitals providing for them separate services in annexes, special pavilions, etc. Priority of admission should be given to patients whose condition would respond rapidly to treatment such as pneumothorax or chemotherapy. Successful treatment, which would render these cases non-infectious, would reduce the risk of the infection's spreading among other people. Having tuberculosis patients in general hospitals would also be beneficial for teaching purposes; students would have an opportunity to learn the most modern methods of diagnosis and treatment, and their attention would be directed to a disease which too often remains undetected.

If tuberculosis patients are admitted to general hospitals adequate measures must, of course, be taken to protect the nursing staff and others who are in contact with them. Regular radiographic examinations, BCG vaccination and general prophylactic measures have already reduced considerably the risk of infection of hospital personnel. In certain hospitals the risks are no greater than in other comparable population groups.

The Expert Committee on Tuberculosis recommended that the collaboration of general hospitals in detecting and treating tuberculosis be encouraged; that the nursing and other staff be adequately protected against infection, and that cases discovered by hospitals be reported to the local health authorities so that contacts of the patients may be examined.

² The paper considered by the committee will be published in a forthcoming number of the *Bulletin of the World Health Organization*.

Mass Radiography

Mass radiography serves two purposes first it permits case finding at an early stage in apparently healthy population groups and secondly it is a rapid method of evaluating tuberculosis morbidity in a certain area before drawing up a control programme However radiographic examinations do not in themselves constitute a sufficient basis for diagnosis laboratory tests are necessary for confirmation In fact cases of tuberculosis should not be reported to health authorities on the basis of x ray examination alone

The committee emphasized that mass radiography is useful only if laboratory and treatment facilities are also available It was of the opinion that in the underdeveloped countries it would be desirable to combine such examinations with tuberculin tests

Research

The committee examined with much interest the report of the WHO Tuberculosis Research Office in Copenhagen It suggested that research be undertaken to re assess the value of the oral method of administering BCG Another subject for research one of some urgency because of the increasing need for a single pre vaccination tuberculin test is determining an appropriate test dose for this test At the meeting of the Joint UNICEF (Medical Subcommittee) and WHO Interim Commission (Subcommittee on Tuberculin Testing and BCG Vaccination) held in Paris in June 1948² a dose of 10 units of tuberculin (TU) for the final Mantoux test was recommended and a minimum of 6 mm diameter induration was set up as the criterion of a positive reaction The Expert Committee on Tuberculosis proposed that for the single test the dose be reduced to 5 TU and that the minimum diameter of induration indicating a positive reaction be fixed at 5 mm as observed three days after inoculation In addition the committee thought it would be desirable to determine what dose of tuberculin should be administered in the surveys which are carried out to determine the incidence of tuberculous infection in a country

Compulsory Notification

Legislative measures concerning notification of tuberculosis vary considerably from country to country In some countries notification of all forms of the disease is compulsory although not always strictly applied in other countries only pulmonary tuberculosis is subject to notification in still others notification is optional

There are often psychological and economic factors which make it difficult to ensure that compulsory notification is observed, especially in places where a feeling of shame is still associated with the disease. In countries where the central and local health administrations are as yet only slightly developed and where the number of doctors is insufficient, it would be useless to try and enforce compulsory notification. The committee thought, however, that, in spite of the difficulties encountered, compulsory notification has greatly increased the efficacy of control programmes in countries where it has actually been observed. It therefore recommended that countries which have not yet adopted this measure consider doing so, enlisting the collaboration of the medical profession in this effort. The committee was of the opinion that only doctors should be entitled to report the cases and that the notification should specify whether or not tubercle bacilli have been found in the patients' sputum or body fluids.

Control of Bovine Tuberculosis

As a result of a resolution of the Third World Health Assembly,⁴ the committee discussed the question of bovine tuberculosis. Except for the Scandinavian countries, bovine tuberculosis is still a problem of major importance in the remaining northern, western, and some of the southern European countries. In these countries the infection of cattle varies between 20% and 60%, with dairy cattle being the most seriously affected. Cattle in Eastern Europe are less subject to attack; it is mainly the herds in the vicinity of the large urban centres which are infected. On the basis of the information available, it would seem that the same applies to the Eastern Mediterranean area, and Central South America.

Contact with infected cattle and consumption of food from such cattle involve risks of infection for man. It is now possible gradually to eliminate bovine tuberculosis thanks to various measures the application of which depends in part on the economic situation of the countries concerned. Tuberculin tests followed by the slaughter or separation from the herd, of infected animals and vaccination with BCG or with the bacilli of murine tuberculosis have already given encouraging results. The final solution of the problem depends upon the combined efforts of agricultural and health authorities. The committee recommended that in each country joint commissions of doctors and veterinarians be set up to study the question and that measures be taken to eliminate bovine tuberculosis which constitutes a threat to both agriculture and public health.

ANAESTHESIOLOGY TRAINING CENTRE, COPENHAGEN

In the past two years the Governments of Czechoslovakia Denmark France Greece Israel Sweden and Yugoslavia have requested WHO assistance in establishing training centres for anaesthesiology Widespread interest in this relatively new speciality is due at least partly to experience gathered during the second World War Modern anaesthesiology has effectively contributed to diminishing surgical mortality rates by preventing complications in the operating room and during the postoperative period Other significant aspects of up to date anaesthesiology as practised in Canada the United Kingdom and the USA have gained recognition in many other countries where the new speciality has not yet been introduced Among these aspects are the new vistas that have been opened up to surgery the increasing desire of obstetricians internists psychiatrists etc to consult with and to use the services of an anaesthesiologist and the recognition by hospital administrators and health authorities of the advantages of an anaesthesiology department to hospital management Public health administrations in Denmark and Sweden for instance have developed plans to provide at least one fully trained full time anaesthesiologist for each hospital in the country Even in countries where anaesthesiology is already a firmly rooted speciality adequately trained anaesthesiologists are not available in such numbers It will take several years to train the required numbers of such personnel in the Scandinavian region and the WHO training centre for anaesthesiology in Copenhagen is designed to assist the governments in carrying out their plans More recently in France the *Ministère de la Santé publique et de la Population* in co operation with the *Ministère de l'Education nationale* and with the medical faculty of the University of Paris has developed similar plans

The training centre for anaesthesiology in Copenhagen was opened on 1 May 1950¹ It is operated jointly by the Danish State Medical Board (*Sundhedsstyrelsen*) and the University of Copenhagen on the one hand and by the World Health Organization on the other Four of Copenhagen's largest hospitals are engaged in the teaching programme the University Hospital (*Rigshospitalet*) the Municipal Hospital the County Hospital (*Københavns Amtssygehus*) and the Bispebjerg Hospital Professor E. Husfeldt selected jointly by the Government and the Faculty is in charge of the administration of the training centre with Dr E. W. Andersen Chief Anaesthetist Copenhagen County Hospital acting as secretary The teaching programme proper is the responsibility of senior instructors provided by the World Health Organization

Originally, training of physicians from only the Scandinavian area was contemplated, however, requests have also been received from countries

**FIG 2 ANAESTHESIOLOGY TRAINING CENTRE
COPENHAGEN 1**



Dr S C Cullen Professor of Anaesthesia at the State University of Iowa USA is shown giving a demonstration at the training centre. Looking on are Dr R M Waters (centre) former Professor of Surgery and Anaesthesiology at the University of Wisconsin USA. Dr E W Andersen (extreme right) Anaesthetist in Chief Copenhagen County Hospital and a group of trainees.

outside the area, and the Danish Government has agreed to the admission of some of these physicians. Besides the Danish trainees, there are at present one physician from Sweden, four from Norway, three from Finland, one from Iceland, one from Yugoslavia, and two from Austria receiving training bringing the total number of trainees to twenty for the first year course of the training centre.

WHO assistance to the Danish Government essentially consists of the following contributions:

- 1 Expert advice in organizing and operating the training centre.

- 2 Granting of fellowships to non Danish trainees. Danish trainees are not entitled to fellowships according to existing regulations, however, they are

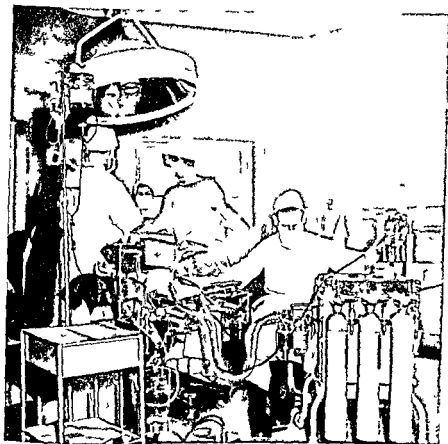
being provided with necessary textbooks just as are non Danish participants in the course.

- 3 Provision of a fairly comprehensive selection of texts and monographs on anaesthesia to serve as a reference library for the training course. Three different models of anaesthesia machines and various accessory equipment that were not available in Denmark have also been provided thereby making it possible for the trainees to work with various types of apparatus.

- 4 Provision of the foreign teaching staff for the entire duration of the courses.

The services of instructors of highest international standing are being sought and acquired. The names of Professors S C Cullen and R M

FIG 3 ANAESTHESIOLOGY TRAINING CENTRE COPENHAGEN II



Modern methods of anaesthesia in practice in the operating room

Waters of the USA of Dr C Grey and Dr W Mushin of the United Kingdom and of Professor T Gordh of Sweden make an impressive list of senior instructors for the current course. Besides these senior instructors a number of fully qualified junior instructors from the United Kingdom and the USA assist the senior chief in his work.

The blue print for the organization of the centre and its curriculum is being developed by Professor Cullen of the State University of Iowa. Trainees undergo intensive training in the operating room where they work under the supervision of their local or foreign instructors. Operating room work takes up more than half the day and is followed by a regular schedule of lectures and conferences covering basic sciences, public health aspects and clinical problems. Danish and foreign instructors in anaesthesiology give most of the lectures, however professors of the medical

faculty of the University of Copenhagen augment these lecture programmes by presenting relevant material on specialized subjects in anatomy, physiology, pharmacology etc. It has also been possible to secure guest lecturers, from the nearby University of Lund Sweden, for example. At certain times, such as during the session of the International Physiology Congress in Copenhagen, it has been possible to enlist the co-operation of some outstanding visitors.

Among the important didactic features of the training course are the so called 'schedule conferences', that take place daily in each hospital, during which the instructor and the trainees discuss all cases scheduled for surgery on the following day. In addition there are the weekly "morbidity and mortality conferences", at which all the complications and deaths in the preceding week are critically considered by the full assembly of instructors and trainees, with chief surgeons of the relevant departments participating frequently. There are also two other regular weekly lectures, the so called "basic science seminar" and lectures on selected subjects. Specialized instruction is given in bronchoscopy and in blood bank management.

Trainees undergo quarterly written examinations. Examination papers are afterwards discussed in detail orally by the instructor and the trainee. Upon completion of the course, trainees will receive a certificate of attendance, issued jointly by the University of Copenhagen and WHO.

FIRST WHO REGIONAL CONFERENCE ON HEALTH STATISTICS

Without the aid of health statistics, only an incomplete picture of the state of health of a people can be obtained which makes it difficult to draw up appropriate programmes and subsequently, to judge their effectiveness. Improvement of health statistics has been considered at several international meetings attended by experts from all parts of the world. However, because of the diversity of conditions from one country to another, the recommendations made at these conferences could be only of a general nature. The study of the problem on a regional rather than a worldwide basis could be more fruitful. With the aim of studying means of improving health statistics in the Eastern Mediterranean Region the first WHO Regional Conference on Health Statistics met at Istanbul Turkey on 8 and 9 September 1950. It was attended by representatives from Egypt Ethiopia, France Iran Iraq Israel Lebanon Pakistan Saudi Arabia Syria, Turkey and the United Kingdom. Dr K. Olcar (Turkey) was elected Chairman. Dr Salem Abd El Maguid (Egypt) Vice Chairman and Dr A. J. Rizali (Iraq) Rapporteur.

Improvement of Health Statistics

The primary requisite of health statistics is reliable population figures. The conference therefore stressed the importance which governments should accord this question and recommended that methodically conducted national censuses be taken at regular intervals and that when official publications give figures for "estimated" population (i.e. not established by census) the method used to make such estimates should be clearly stated.

Incorporation into national laws of the new definitions proposed by the Subcommittee on the Definition of Stillbirth and Abortion¹ and adopted by the Third World Health Assembly would also lead to improvement in the registration and value of demographic data particularly those concerning birth. The conference therefore requested all countries to make use of these definitions as soon as possible in their own statistical practice.

As regards mortality statistics the conference recommended that in compiling them attention be paid to the place of residence of the deceased persons. In countries where medical organization is not very highly developed it is frequently possible to obtain proper medical care only in large towns. Consequently sick persons go there in large numbers and in the event of their death an element of error is introduced into the statistics since mortality appears much higher in such centres than in other parts of the country. Furthermore in the interpretation of mortality statistics by cause of death it is necessary to bear in mind the very unequal value of data based on observations made by qualified medical staff as compared with those referring to deaths where the cause has not been medically certified. The reliability of diagnosis in this latter category may be rightly and strongly doubted and very critical judgement should be exercised in this respect. Consequently the conference recommended that in the future a clear separation be made on statistics by causes of death between those which have been medically certified and others. Moreover it is to be hoped that the proportion of the latter will gradually decrease.

It will be the responsibility of national administrations to implement these various recommendations with a view to obtaining reliable health statistics. The same aim could be attained more rapidly if an interest in statistics could be aroused in physicians and hygienists and a systematic study of these problems made. For this reason the conference requested the various governments of the region to set up national committees on vital and health statistics to study the special problems which arise in each country and to ensure international co-ordination in this field. WHO acting as intermediary.

Centralization of Data

Another task which WHO and its regional organizations must fulfil is the collection of a certain amount of basic statistical information so as to give an adequate picture of the situation in each country and permit the elaboration of appropriate health programmes. The conference therefore requested the Regional Director to submit to governments of the States of the region a list indicating the various vital and health statistics which they would have to supply to the Regional Office. The governments, in turn, will formulate and submit their observations a necessity since they are perhaps not all in a position—owing to lack of suitable institutions or qualified staff—to collect as complete information as might be desired and must, therefore, qualify the minimum list of fundamental statistical data to be furnished by each country.

A similar effort will be undertaken to standardize the different types of forms and reports concerning vital and health statistics.

Training of Personnel

The different ways of approaching the question of improvement of health statistics show that one of the essential problems to be solved is that of the statistical training of medical personnel. The conference therefore adopted the resolution on this subject which was adopted by the Expert Committee on Health Statistics² and noted by the Second World Health Assembly. This resolution stresses the importance of

(1) elementary training in statistical methodology for all medical students,

(2) more advanced teaching of the same subject to physicians training for posts in public health administration,

(3) instruction in the elements of medical statistics for non medical personnel engaged in certain statistical work.

These measures however can give tangible results only after some time. The conference therefore drew up a proposal along the same lines which can be put into effect immediately. This consists of the possible organization under the joint auspices of the United Nations and WHO of a regional instruction course in vital and health statistics for medical personnel and those specially concerned with these questions in the competent national services. It likewise suggested the setting up of a shorter course for auxiliary statistical personnel. The representative of Iran, on behalf of his government proposed that the centre be established in his country and offered all the necessary facilities.

LYMPHOGRANULOMA VENEREUM

Lymphogranuloma venereum, which has been described under various names such as lymphogranuloma inguinale Frei's disease Nicolas Favre disease and fourth venereal disease is caused by a specific virus. The skin test introduced by Frei in 1925 has made possible studies which have shown that the geographical distribution of this disease is more extensive than had been supposed that it is in fact worldwide though its incidence is greater in the tropics.

The epidemiology etiology clinical aspects diagnosis and treatment of lymphogranuloma venereum are the subject of a comprehensive and up-to-date review appearing in a recent number of the *Bulletin of the World Health Organization*¹ by Professor W. E. Coutts, Chief of the Department of Social Hygiene, Public Health Administration, Santiago, Chile, and member of the WHO Expert Committee on Venereal Infections.

This disease is generally of venereal origin. However, other possible sources of infection such as unnatural sexual intercourse and accidental contagion of the kind which might occur in the laboratory should not be ignored. In addition, the existence of asymptomatic carriers has been proved.

Lymphogranuloma venereum is caused by a virus of a lymphotropic nature. This lymphotropism is responsible for the differentiation in the type of involvement observed in clinical practice as infection spreads mainly along the lymphatics. The virus is active at room temperature for 24-28 hours and remains active after drying for 30 days.

The clinical manifestations may be grouped into three stages: primary, secondary, and tertiary. The initial lesion appears on the genitalia, rectum, mouth, etc. from 10 to 30 days after exposure. This lesion is generally an ulcer with clear-cut edges surrounded by a reddened zone and with a whitish-grey base. A local or regional oedema forms, producing phimosis in men and swelling of the external genitalia in women. These primary manifestations are accompanied by inflammatory symptoms at the site of infection—urethritis, vaginitis, proctitis, stomatitis, etc. Adenopathy appears in the lymphatic drainage area corresponding to the site of penetration of the virus. In many cases (50%–70%) the bubo is the first noticeable sign of the disease but it is actually only one of a complex of manifestations which are symptoms of the secondary period. The appearance of the bubo is accompanied by a sensation of stiffness and aching. The process extends until all the glands of the group are involved, the infected lymph nodes forming one conglomerate mass and adhering to the skin covering them which is of a rather characteristic purplish colour. Softening then occurs in one or more zones and formation of abscesses and fistulas from which first pus and later a sero-viscid fluid drains is a characteristic feature.

The adenopathy usually subsides after 2 or 3 months but draining sinuses may persist for a much longer period. The location of the buboes depends on the site of the initial infection. In 75% of cases there is involvement of the deep iliac lymph nodes. This is frequently accompanied by complications due to the inflammation of these glands and diagnosis becomes difficult, particularly if the primary manifestations are not characteristic.

The constitutional reactions are not specific but may overshadow the local manifestations of lymphogranuloma on account of their severity. They include fever, headache, vomiting, rheumatoid manifestations, etc. The disease is accompanied by secondary anaemia and leucocytosis, the erythrocyte sedimentation rate is considerably increased and hyperglobulinaemia and decrease of serum lipids are also observed. After the secondary period, many patients become asymptomatic. Others present extremely varied clinical pictures, the syndromes corresponding to manifestations appearing on or around the genitalia.

The tertiary stage is marked by symptoms such as esthiomene, urethro-genito-perineal syndrome, elephantiasis of the penis and scrotum, rectal stenosis, and plastic induration of the penis. Esthiomene is characterized by a chronic ulcerative process which appears on the external surface of the labia majora, on the genito-crural folds, lateral and anterior regions of perineum, mons veneris, etc. The urethro-genito-perineal syndrome is characterized by the appearance of penile, scrotal, or perineal sinuses from which drains a sero-viscid fluid or urine or a mixture of both. It may be present with or without urethral stenosis. Rectal stenosis may present itself as the only manifestation of the disease, or as a complication or integrant of genital syndromes, and appears from 1 to 10 years or more after the initial infection. Other manifestations affecting the skin, cardiovascular system (pericardial symphysis, arteriosclerosis, obliterative arteritis, etc.), respiratory system, digestive system (glossitis, oesophageal ulcers, gastritis, cholecystitis, etc.) and nervous system have also been described.

Diagnosis may be made by various methods and procedures including Frei's intracutaneous test, the complement fixation test, culture of the virus and histopathological changes. Routine diagnosis is based principally on Frei's intracutaneous test. This highly specific reaction is characterized by the appearance of a papule of 6×6 mm with surrounding erythema 48-72 hours after injection of the specific antigen. The results obtained with the complement fixation test have been shown to be more specific than those with the intracutaneous test. Other advantages of the former test are that it makes mass screening of population groups possible and that it can be carried out at the same time as serological examination for syphilis.

Up to the present time, medical and surgical therapies have been rather unsatisfactory. The sulfonamides and most of the antibiotics have not proved very useful. However, more encouraging results have been obtained

with aureomycin. One week after treatment had begun no elementary or inclusion bodies could be detected from smears made by aspiration of buboes. In patients suffering from proctitis definite improvement was noted after 4 to 8 days.

THIRD INTERNATIONAL DIGITALIS STANDARD

Digitalis is one of the 37 substances for which international standards have been established during the past 25 years. The first digitalis standard was adopted in 1926 by the Permanent Commission on Biological Standardization of the League of Nations Health Organization. Owing to the demand stocks of the standard were exhausted in 1935 and a second standard was therefore prepared. In 1947 when this supply also was running out the Expert Committee on Biological Standardization of the World Health Organization authorized the Department of Biological Standards of the National Institute for Medical Research London to make arrangements for renewal of the standard.

In a recent article in the *Bulletin of the World Health Organization*¹ Dr A. A. Miles, Director of the Department of Biological Standards of the National Institute for Medical Research London and Dr W. L. M. Perry of the Department of Physiology and Pharmacology of the same institute describe the various stages in the preparation and assay of the new standard.

The material for the preparation of the standard was obtained by mixing six batches of digitalis powder procured from three different countries (USA, United Kingdom and Switzerland). The biological assay against the second standard was carried out in 16 laboratories of eight different countries.

The authors give a statistical analysis of the results of all the assays and describe the methods employed to obtain by a combination of these results a potency unit for the new standard. The unit of the third international digitalis standard is defined as the activity contained in 76 mg of the standard preparation. This unit differs very little from that of the second standard which was defined as the activity contained in 80 mg of the earlier preparation.

A comprehensive annex includes details of the procedures prescribed to the laboratories for the cat, guinea pig and frog assays. It is known that there is not complete agreement between the results of assays on different animals. The authors also explain the advantages and disadvantages of each procedure.

RECENT ENTOMOLOGICAL RESEARCH

Two articles on insect disease vectors have just appeared recently in the *Bulletin of the World Health Organization*. The first, by Dr Karl Jordan formerly Director of the Zoological Museum, Tring, Hertfordshire (England) is entitled "Notes on a collection of fleas from Peru".¹ Twenty species of fleas collected in 1946 and 1947 during the investigation of outbreaks of wild rodent plague in certain districts of Peru were identified at the Zoological Museum Tring. Four of these species were previously unknown and a detailed description of them is given. Several of the others were new for Peru. The resemblance between some of the specimens and certain northern species raises interesting questions regarding the geographical distribution and evolution of the various species, certain subspecies may represent stages in their evolution.

In a study entitled "Malaria along the Mexican United States border",² Dr L. Vargas of the Instituto de Salubridad y Enfermedades Tropicales and of the Dirección de Cooperación Interamericana de Salubridad Pública, Mexico, gives a list of species of *Anopheles* which are encountered on both sides of the frontier between Mexico and the USA and which play an important role in the transmission of malaria. Dr Vargas surveys the geographical distribution and characteristics of the different species. *Anopheles freeborni*, *A. pseudopunctipennis typicus*, *A. quadrimaculatus*, and *A. albimanus* may be considered as the most frequent malaria vectors in the region.

¹ *Bull. World Hlth Org.* 1950 2: 597

² *Bull. World Hlth Org.* 1950 2: 611

INFANT MORTALITY IN ICELAND

An improvement in general living conditions and the standard of education in a country generally results in a decline in the infant mortality rate. This phenomenon is well illustrated by the case of Iceland as pointed out by Dr J. Sigurjónsson, Professor of Hygiene at the University of Iceland.¹

The infant mortality rate in Iceland has shown a continuous decrease, amounting roughly to 20%–22% per decade during the last century, so that it is now less than one tenth of what it was a hundred years ago. This trend has accompanied a rise in the standard of living and sanitary conditions of the country although special child welfare services are of recent origin. A tenfold increase in the number of doctors is another factor which has contributed to the decreasing infant death rate.

¹ *Bull. World Hlth Org.* 1950 2: 723

The average rate for the period from 1941 to 1947 was 33.7 deaths per 1 000 live births. The lowest value reached for a single year was 22 in 1947. Until 1945 the decline in the rate of mortality of infants under one month in age was as significant as that of the total infant death rate. Since 1911 the decrease in deaths from respiratory diseases and gastro-intestinal disorders has been most marked, whereas death rates due to prenatal and natal causes have remained almost stationary at just below 20 per 1 000 live births. It is hoped that through better care of women during pregnancy and delivery it will be possible to reduce the number of deaths due to prenatal and natal causes so that the total infant mortality will be below 20 per 1 000 live born children during the next decades.

EVOLUTION OF MORTALITY IN EUROPE, 1900-1947

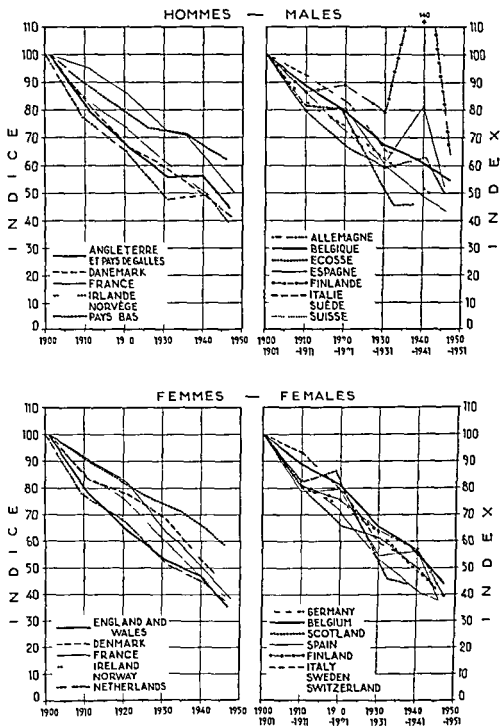
A new contribution to the series of studies on mortality in Europe during the twentieth century has just appeared in the *Epidemiological and Vital Statistics Report*¹. Data concerning mortality by sex and by age without distinction as to cause of death have been analysed by Dr M. Pascua, Deputy Director, Division of Health Statistics, WHO.

As stressed by the author, the accuracy of the statistics is not the same in all countries. Errors may arise, particularly those due to incorrect data concerning age supplied by the population during censuses and to the relative number of deaths classified under the heading 'age unknown'. Thus all the data cannot be accepted as strictly accurate. However, it would be merely empty scepticism to refuse to believe the information at our disposal, which clearly reveals a considerable fall in mortality in Europe. This decrease is of the order of 40%.

After having indicated on what basis the statistics have been analysed and the periods considered in the various countries, Dr Pascua reviews the evolution of mortality by age group and by sex in each of the following countries: Belgium, Denmark, England and Wales, Finland, France, Germany, Ireland (not including Northern Ireland), Italy, the Netherlands, Norway, Portugal, Scotland, Spain, Sweden, and Switzerland. The following are some of the general conclusions drawn by the author from this study.

The fall in infant mortality as a whole exceeds 50%. In certain countries (Denmark, England and Wales, the Netherlands, Sweden, and Switzerland) the infant mortality rate is one third lower than at the beginning of the century. Among children of preschool age (1 to 4 years) the fall in mortality is still more striking. In certain countries the mortality rate is about a quarter of that of 1900-1901. It is interesting to note in this connexion that the movements of relative decline have been similar in a large number

FIG 4 TREND OF MORTALITY IN AGE GROUPS UNDER 65 YEARS



1901 = 100

1900-1901 = 100

of countries with great differences in their public health organization medical care for children and social and economic conditions. The analysis of mortality by cause of death which will be subsequently studied will no doubt help to explain this problem.

For other age groups up to 45 or 50 years the specific mortality rates have been reduced by at least half in the majority of the countries considered with the exception of Ireland. In Belgium and Spain however at least in the case of males the decrease is not so pronounced. In a general way for ages below 65 a continual and distinct decrease can be noticed the present mortality rates ranging between 40% and 60% of what they were at the beginning of the century.

As concerns the age group of 75 and above some fluctuations of the specific mortality rates can be observed during the half century a general fall of 10% to 15% being evident around 1946. This figure has been exceeded in the Netherlands where the decline has been clearly marked since the end of the second World War. In Sweden on the other hand there has been no decrease in mortality rate for this age group.

In all countries the lowest mortality rates both at the beginning of the century and in more recent periods have been registered for the age group of 10 to 14 years.

The second factor whose bearing on mortality has been considered in this study is sex. Are there any appreciable differences in mortality according to sex? In the recent period and for all ages it is found that the mortality rate for males is higher than that for females the ratio of the two rates reaching 1.23 in Spain in 1946 and 1.19 in England and Wales in 1947. Only Sweden shows equal rates for both sexes.

The mortality of male babies has always been higher than that of female babies the difference amounting sometimes to 20% / 25%. In the Iberian Peninsula and in Italy however the difference has been less pronounced the quotient frequently being only 1.12.

At the beginning of the century the mortality among boys of school age was lower than that among girls. At present the reverse is observed and the quotient varies between 1.40 and 1.50 for children aged 5 to 9 (Denmark Norway Sweden Switzerland). It often exceeds 1.20 for the 10 to 14 age group (Denmark England and Wales France Germany Italy Norway the Netherlands and Scotland).

As regards ages between 15 and 75 a similar phenomenon is seen the mortality of males in recent periods has been definitely higher than that among females quotients reaching 1.60 or 1.70 not being uncommon in middle age. Generally speaking this difference in mortality rates between the sexes was not so pronounced at the beginning of the century. At that period the quotients of the rates were not far from 1. It is certain that the after effects of the two world wars are reflected in these figures. However in Ireland no significant difference can be observed between the mortality

rates for the two sexes. The quotient of the rates remains at about 1 for ages between 15 and 50. In Denmark there is a tendency for the rates to be equal.

For persons aged 75 years and above, the quotient of the mortality rates by sex has varied only slightly during the half century. The mortality rate for men in this age group is generally 10% to 15% higher than that for women in the same group. This difference is lower in the Scandinavian countries and the Netherlands.

The author has tried to give a tentative estimate of the number of deaths which would have occurred around 1947 if the mortality rates had remained the same as at the beginning of the century. He also gives the theoretical number of lives "saved". The population of 13 of the countries in question for which information relating to 1947 is available, comes to 203 000,000. If the mortality rates had remained constant since 1900 there would have been 4 187,000 deaths in 1947 for all age groups, i.e. 1,750 000 more than the number actually observed. The decrease in mortality may therefore be put at 42%. The saving in human life among babies was 60%. It amounted to 69% for children aged 1 to 5 and 18% for persons aged 75 years and over.

Reports from WHO Fellows

Many of the letters and reports received from WHO Fellows have been of such interest that they deserve to be read by a wider public. They demonstrate more vividly than a series of facts and figures both the nature of the fellowship programme and the response of the Fellows themselves. Selections from these reports are therefore published from time to time but it must be emphasized that the opinions expressed are those of the Fellows.

The Architecture of Hospital Buildings

Mr S. Kliska, Professor at a technical school in Belgrade (Yugoslavia), made a three months' study-trip as a WHO Fellow. He went to Denmark, England, Sweden and Switzerland in order to visit the principal hospital buildings in these countries and to study present architectural trends in this field. Below is some of the information which he obtained during his visit to Sweden, a country where the hospital services are being greatly expanded.

The modernization of the Swedish hospital system has provoked much discussion in interested circles. Although new hospitals have been constructed, the greater number of beds is still found in the older ones, and despite construction carried out during the war, the hospital services do not yet completely cover all needs.

According to Mr Kliska the first question which arises is whether the older hospitals should be remodelled or whether new ones should be constructed. Because of the spread of blocks of flats and of industrial buildings it is often difficult to find a suitable site for a new hospital in large towns. Consequently the problem becomes one of determining how hospitals which are satisfactorily situated can be retained with services being continued while modernization is taking place. Some attempts in this direction have been made such as partial reconstruction or remodelling and adaptation to new medical needs. On the whole such efforts have been rather unsatisfactory therefore the necessity of constructing rather than reconstructing demands attention.

Another question must then be answered: what type of hospital is preferable? A number of architects are in favour of total centralization as opposed to the so-called pavilion system. In Stockholm Mr Kliska was able to visit two large modern hospitals one of which the *Karolinska Hospital* includes pavilions for the psychiatric services a radium institute and other separate departments in addition to the central building. While recognizing the advantages of some degree of decentralization Mr Kliska feels that the *Karolinska Hospital* does not serve as a good example of the value of this idea. Centralization if it can include exceptions in certain specific cases would seem preferable.

As regards the distribution of the various services the relationship between hospital and polyclinic should be defined. The hospitals mentioned above both have polyclinics as an integral part of the central block. It may be noted that in certain modern layouts the polyclinic governs the planning of the structure as a whole e.g. the *Smöreslätet Hospital* at Göteborg. It is the nature of the duties carried out by the polyclinic which determines to what extent contact with the hospital should be maintained. If the polyclinic is utilized—as was formerly the case—for the treatment of patients after their discharge from the hospital or as a training centre it is indispensable for it to form part of the hospital. On the other hand if it is assumed that the polyclinic plays a more important role and that it should have a separate organization then there is no reason for connexion with the hospital other than that provided by the admitting department.

Advances in medicine and changing methods of treatment have caused considerable alterations in hospital services. Furthermore improvement in social conditions which enables a greater number of people to benefit by hospital treatment makes it necessary to arrange for a sufficient number of beds to cover all needs. For these and other reasons the modern hospital should be planned so that it can be readily enlarged.

The opinions of Swedish architects vary with regard to the placement of facilities such as the main kitchen and the staff residence quarters. Whereas formerly the kitchen was placed on the top floor of the building the present tendency is to install it on a lower floor though not in the basement. It has been recognized that staff quarters should be constructed outside the hospital proper so that the staff may enjoy greater freedom of movement.

Mr Kliska paid particular attention to the activities of two bureaux which have been set up in Sweden for the improvement of hospital architecture and the organization of medical institutions. These bureaux come directly under the Ministry of Internal Affairs and work in co-operation with the Director of Public Health and through them Mr Kliska was able to consult with leading Swedish architects who participate in the research work of the bureaux.

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of Iraq with the support of the United Nations International Children's Emergency Fund (UNICEF) which is believed to be a form of endemic syphilis is widespread among certain nomadic and semi-nomadic populations in the Eastern Mediterranean area. The project for its control in this area will be based on penicillin treatment which has proved highly effective against other treponematoses. Epidemiological and laboratory studies will be carried out concomitant with the control measures.

D. E. H. Hudson, Director of Health Service, Ohio University, and author of *Treponematoses*, a standard work on the subject, has been named chief medical adviser for the project. Dr Hudson left for Baghdad early in October to begin preliminary operations. Additional WHO personnel are expected to join him later.

Relief to the Civilian Population in Korea

Following an appeal from the United Nations, WHO has appointed a mission to Korea to assist in the relief and support of the civilian population. The mission will work under the Unified Command.

Dr Walter H. Crichton (United Kingdom), director of the mission, will act as adviser to the Ministry of Public Health and Social Affairs of Korea and will maintain liaison between the Unified Command and the Ministry. Dr Crichton has wide experience in public health administration and epidemic control campaigns. He will be assisted by another public health administration officer.

Five teams, each consisting of a public health officer and a sanitary engineer or sanitary inspector, will advise the local health authorities on the control and prevention of epidemics and on sanitation problems.

Rural Health Demonstration and Training Centre in the Philippines

The Government of the Philippines, with assistance from the United Nations International Children's Emergency Fund (UNICEF) and WHO, is opening a rural health demonstration and training centre at which health personnel of many types will receive instruction. Special emphasis will be given to maternal and child health, but the centre will also be concerned with the prevention and control of communicable diseases, tuberculosis and malaria control, nutrition, sanitation, vital statistics, health education, nursing services and other important public health problems.

Dr C. Ferrufino (Bolivia) has been appointed by WHO to serve as consultant on maternal and child health activities in this project. Dr Ferrufino received his medical training in Santiago, Chile, and at Harvard University, USA. He is chief of the medical division of the Servicio Cooperativo Interamericano de Salud Pública and teaches child hygiene and care in various institutions. He was formerly General Inspector of Health in Bolivia; he also served with UNRRA as Chief Medical Officer in displaced persons assembly centres.

Assisting Dr Ferrufino in his Philippines assignment will be a WHO nurse, Miss W. Visscher, who was formerly with the maternal and child health team in Korea.

Nursing Conference Held in Leyden

In early October a two-week conference on nursing was held in Leyden, the Netherlands. Forty-four public health nurses from Belgium, Denmark, England, Finland, France, Ireland, Luxemburg, the Netherlands, Norway, and Sweden attended this conference, which was organized by the Netherlands Government and WHO. Professor R. Remmelts, Director of the Institute of Preventive Medicine, Leyden, directed the

Notes and News

International Training Centre for Biostatistics

International training and study centres for biostatistics (vital and health statistics) are to be organized in various countries on the model of the meetings devoted to statistics and censuses which recently took place in Mexico City, Cairo and New Delhi. These centres, in whose formation WHO is particularly interested, will have the task of organizing refresher courses for personnel dealing with biostatistics in national administrations. They will thus make an important contribution to the improvement of statistical methods in use in the different countries and help thereby to increase the efficiency of their statistical services.

The first Inter American Seminar for Biostatistics has been organized in Chile with the assistance of WHO. It will deal mainly with statistical methods and the co-ordination which should exist between different institutions in the same country, i.e. registry offices, services for health statistics, central statistical offices, etc. The courses will last about three months so that the instruction given may have the required technical character.

The various problems raised by vital and health statistics will be approached above all from the practical point of view. The participants will certainly not all have the same range of knowledge. Consequently it will be necessary, regardless of the nature of their previous training, to teach them first the essential elements of statistics, provision is also made for more advanced courses.

The discussion meetings, because of their non-theoretical character, will deal with a restricted number of subjects and include a study of the problems most frequently encountered. Special attention will be paid to practical work so as to enable all students to benefit by the experience already acquired in countries other than their own.

WHO Assists in Paediatrics Training Activities in India

WHO is furnishing technical guidance and assistance in a joint project of the Government of India and the United Nations International Children's Emergency Fund (UNICEF) for the development of a modern training centre in paediatrics in Delhi Province. UNICEF funds will be used to provide personnel and equipment for a maternal and child health project already taking shape in a rural area of the province and for enlarging and improving Delhi hospital facilities to serve as a training centre for paediatricians and paediatric nurses from all parts of India.

Dr B. Landtman (Finland) and Miss N. Toy (Canada) form a WHO team which has been attached to the staff of the Irwin Hospital, New Delhi, to give practical assistance in this project. Dr Landtman is a specialist in paediatrics who worked in the Children's Hospital of the University of Helsinki and subsequently in children's hospitals in London and Stockholm. Miss Toy taught at the Toronto Hospital for Sick Children and was on the staff of the Montreal Child Health Association in Canada. In addition to her present work at the Irwin Hospital, she is teaching paediatric nursing to students at the Delhi College of Nursing.

Bejel Control Project in Iraq

Acting upon recommendations of the Expert Committee on Venereal Infections,¹ WHO is assisting in a bejel-control project which is being undertaken by the Government



CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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conference. In addition to representatives of WHO speakers included several Dutch health officials.

This was a "working" conference at which views were exchanged on problems facing the nurse today and on the role of the nurse in the light of new trends in public health. Among the special topics discussed were health education, mental health, nutrition, and the social aspects of public health work.

CORRIGENDUM

1950 Vol 4, No 7 8 p 224

Line 27	<i>for</i> Old tuberculin	0.01 ml
	<i>read</i> Old tuberculin	0.00001 ml

LEYDEN AND STOCKHOLM SEMINARS ON INFANT METABOLISM

Dr S Z LEVINE

*Professor of Pediatrics and Pediatrician in Chief New York Hospital
Cornell Medical Center*

Two seminars on infant metabolism were recently held under the aegis of WHO and at the invitation of the governments of the Netherlands and Sweden. Each was of approximately two weeks' duration: the first taking place in Leyden from 15 to 30 October, the second in Stockholm from 1 to 15 November. The participants included paediatricians and scientists from the host countries, delegates from Belgium, Denmark, Finland, France, and Norway, a visiting team of four from the USA, and WHO staff members. Three continents, eight countries, and twenty-one universities were represented, and well over 125 persons took part in one or more of the panel meetings. In the group were physiologists, biochemists, physicists (isotope research), internists, endocrinologists, obstetricians, ophthalmologists, nutritionists, and others, in addition to paediatricians. Paediatric conferences with as broad a basis as these will undoubtedly help to elevate child welfare throughout the world.

The chairmen of the conferences, Professor E. Gorter at Leyden, and Professor A. Wallgren at Stockholm, in collaboration with the WHO staff and Dr S. Z. Levine, Chairman of the visiting team from the USA, were responsible for arranging the conduct and content of the seminars.

The attendance at and participation in the opening exercises at Leyden by Dr P. M. Dorolle, WHO Deputy Director General, and at Stockholm by Dr Brock Chisholm, WHO Director General, played an important role in getting the conferences off to a good start. The study sessions themselves, which were carried on in a highly informal manner, called for free, frank, and objective discussion. The transactions were recorded verbatim by sound recorders and will subsequently be published.

The subjects discussed might be considered to fall into three main groups: (a) new methods and techniques; (b) subjects of mutual interest in which participants are already actively engaged; and (c) fields of study which have not as yet engaged the intensive attention of the scientists of one or more of the participating countries. In terms of these aspects, the seminars in Leyden and Stockholm would appear to me to have fulfilled the purpose of such gatherings: in both countries there was a nice distribution of all three elements. Special reference might be made to the high development among the Swedish scientists of biophysical methods, including paper electrophoresis, radio-active tracers, and paper chromatography. These methodological approaches will undoubtedly lead to future advances.

RECENT AND FORTHCOMING MEETINGS

1950

4-11 October	WHO Expert Committee on Insecticides second session Geneva
9-18 October	WHO Expert Committee on International Epidemiology and Quarantine third session Geneva
30 October 4 November	WHO Expert Committee on the Unification of Pharmacopoeias seventh session Geneva
2-9 November	WHO Expert Committee on International Epidemiology and Quarantine Legal Subcommittee third session Geneva
6-7 November	WHO Expert Committee on the Unification of Pharmacopoeias Subcommittee on Non Proprietary Names first session Geneva
6-11 November	WHO Expert Committee on Biological Standardization fourth session Geneva
6-13 November	WHO/FAO Expert Advisory Panel on Brucellosis first session Washington
27 November 9 December	Commission for Technical Co-operation in Africa WHO Malaria Conference in Equatorial Africa Kampala Uganda
11-12 December	Meeting of Experts of WHO Technical Advisory Group on Public Health Administration Geneva
11-16 December	WHO Expert Committee on Malaria fourth session Kampala Uganda
11-16 December	WHO Expert Committee on Mental Health Subcommittee on Alcoholism first session Geneva
11-16 December	WHO/FAO Consultant Group on Bovine Tuberculosis and Other Zoonoses first session Geneva

1951

8 January	WHO Executive Board Standing Committee on Administration and Finance
22 January	WHO Executive Board seventh session Geneva
April tentatively	WHO Expert Committee on International Epidemiology and Quarantine fourth session Geneva
April	WHO Expert Committee on the Unification of Pharmacopoeias eighth session Geneva
April	Joint FAO/WHO Expert Committee on Nutrition second session Rome
9 April	WHO Special Committee to consider the Draft International Sanitary Regulations prepared by the Expert Committee on International Epidemiology and Quarantine Geneva
April or May tentatively	WHO Expert Committee on International Epidemiology and Quarantine Legal Subcommittee fourth session Geneva
7 May	Fourth World Health Assembly Geneva

the relation of basal metabolism to blood and heart volume in infants
retrolental fibroplasia in premature infants etc

An exchange of information at an objective level in order to be most effective must be supplemented by cordial personal interrelationships among those imparting and receiving the information. It is my impression that in these seminars the co operation which was established between the representatives of the visiting team the participants from the neighbouring countries and those in the host countries was eminently successful. A

FIG 2 INFANT METABOLISM SEMINAR-II



One of the round table discussions at the Leyde a mina

friendly spirit of objective critical evaluation permeated the actual discussions at the seminars in a highly beneficial way

The importance of conferences of this nature stems from the informal manner of their conduct from the "curbstone" contacts with others afforded to men working in isolated fields of research and from the opportunities for disseminating highly specialized scientific information to sections of the world which have been deprived of these opportunities through force of circumstances. One can readily envisage that close international relationships among large numbers of eminent medical scientists in all the highly industrialized countries could be formed by the multiplication of such study groups in this and other branches of medical research

in the field of infant metabolism. Similarly, in Leyden, the presentation and demonstration of microtechniques as developed by Professor O. Bessey (Chicago) for analysis of biological fluids in infants served an exceedingly useful purpose.

At both the Leyden and the Stockholm seminars, there were a number of subjects in which representatives of several countries had been actively engaged. There was therefore a great deal of discussion which undoubtedly led to new lines of thought in certain cases, for example, with regard to

FIG. 1. INFANT METABOLISM SEMINAR—I



Dr. S. Z. Levine lecturing at the seminar in Leyden. Seated to the right is Professor E. Gorter, Chairman.

fat metabolism in relation to coeliac disease, physiological foetal and neonatal hypoxia, nitrogen, creatin and creatinine metabolism in infancy and human versus cows' milk in the feeding of premature infants. In Stockholm, such subjects as fluid and electrolyte losses in dehydration, calcium, phosphorus and vitamin D metabolism, nitrogen, creatin and creatinine metabolism in infancy, vitamin K, the feeding of premature infants and studies of kidney function aroused great interest.

The third group of subjects—those which had not been studied intensively in one or more of the participating countries—included, for instance, the effect of ACTH and the adrenocortical steroids on premature infants, the use of tocopherols in the neonatal period, the relation between hypophysis and the adrenal glands in calcium and phosphorus metabolism, the molecular structure of mineral salts in bone tissue during growth.

may give rise to serious disturbances in family relationships. Authoritative advice from and an understanding attitude on the part of the health worker can do much to aid the prospective parents in making satisfactory emotional adjustments.

Infants and pre school children Many infant health practices—such as rigid feeding schedules, intolerant and premature toilet training and restriction of infantile movement—may be damaging to the child's

FIG 3 EXPERT COMMITTEE ON MENTAL HEALTH SECOND SESSION



Left to right: Dr A. C. Pacheco de Silva, Dr H. de Ruyter, Dr T. F. Rodg-
Dr W. C. Menninger (Chairman), Dr G. R. Hagge (WHO)

development and to his subsequent mental health. Public health workers who deal with infants should try to make parents aware of this danger.

Of primary importance in the early years of a child's life is the mother-child relationship, and health workers should try to preserve, strengthen and stabilize this relationship. Separation of a child from its mother, particularly during the first three years, should be avoided except as an emergency measure. The committee discussed in detail the situations which necessitate separation of infants from their mothers, the emotional consequences, and the different types of placement in homes or institutions to which the child may be subject. Highlights of this discussion follow.

1. It was pointed out that governments which establish day nurseries or creches in order that mothers of pre-school children may undertake

MENTAL HYGIENE AND PUBLIC HEALTH

At its second session held from 11 to 16 September 1950¹ the Expert Committee on Mental Health concentrated on showing specific ways in which mental hygiene is the concern of public health services and on discussing mental health problems which they may encounter

Definitions

The committee recognized the necessity for explaining as precisely as possible what is meant by the terms 'mental health' and 'mental hygiene'. 'Mental health' was defined as a condition, subject to fluctuations due to biological and social factors, which enables the individual to achieve a satisfactory synthesis of his own potentially conflicting instinctive drives to form and maintain harmonious relations with others, and to participate in constructive changes in his social and physical environment. 'Mental hygiene' was interpreted as referring to all the activities and techniques which encourage and maintain mental health.

Mental Hygiene in Public Health Practice

Mental hygiene enters directly or indirectly, into all phases of public health service. The committee attempted to illustrate how knowledge derived from clinical psychiatry can be applied to public health practice and to stimulate those engaged in this practice to an increased awareness and understanding of the mental hygiene implications of their work.

Family services

Maternity. In dealing with prospective parents, public health workers tend to overlook the emotional significance of the experience. The fears, natural and unnatural, and the ambivalence (i.e. changeable feelings) of the pregnant woman and her husband concerning the expected child

— — — — —
The following took part in the session

Members

- Dr W. C. Menninger, The Menninger Foundation, Topeka, Kansas, USA (*Chairman*)
Dr Elsa B. Nordlund, Director, Child Guidance Department, Norrtnulls Hospital, Stockholm, Sweden
Dr A. C. Pacheco e Silva, Professor of Clinical Psychiatry, University of São Paulo, Brazil
Dr T. F. Rodger, Professor of Psychological Medicine, University of Glasgow, United Kingdom (*Rapporteur*)
M^{lle} J. Roudinesco, Médecin de l'Hôpital Ambroise Paré (Service de Psychiatrie Infantile), Paris, France
Dr Th. H. de Ruyster, Director of the Department of Mental Health, City Medical Service, Amsterdam, Netherlands
Dr K. Soddy, Assistant Director, World Federation for Mental Health, London, United Kingdom
Dr K. Zimmerman, Chief, Mental Health Service, California State Department of Public Health, San Francisco, USA

Secretary

Dr G. R. Hargreaves, Chief, Mental Health Section, WHO

mental health problems. Leprosy, tuberculosis and venereal infections may be cited as specific examples. In leper colonies the incidence of psychological disorders is such that psychiatric hospitals have had to be provided in some of them. In tuberculosis sanatoria the psychological effects of prolonged segregation and loss of a sense of purpose in life can greatly hamper success of treatment. tuberculosis patients also suffer from these effects when they attempt to adjust to normal life after discharge from sanatoria. With regard to venereal diseases the chief mental health concern is the psychological factors involved in sexual promiscuity. The mental hygienist is also concerned with the psychological implications of educational campaigns associated with anti venereal disease measures. he can assist public health workers in making such campaigns effective.

Health education of the public

Mental health education is most successful if carried out in a personal manner. Mass education techniques applied to health education in general and to mental hygiene in particular may sometimes do more harm than good. The committee called particular attention to the psychological hazards of campaigns for raising funds to fight certain diseases such as cancer or poliomyelitis. the misconceptions and anxieties to which the public is subjected by such campaigns may be harmful from the mental health viewpoint. There are two ways however in which mass education techniques may be useful. in efforts concerned with accident prevention and in the dissemination of information to oppose the hypochondriacal effects of the commercial advertising to the public of proprietary remedies. in many highly developed countries this advertising is of a type which actually encourages minor psychosomatic illnesses such as headaches and indigestion.

Immigration

The early life of immigrants in their new country is one of emotional stress and may cause serious disturbances in family relationships because of the comparatively greater ease with which younger members of the family adapt to the change in environment. In any community where immigrants exist in considerable numbers public health workers need to understand the normal psychological problems involved in moving permanently to another country.

Mental Hygiene Training for Public Health Workers

Although training of this type is still in the experimental stage the committee was able to enumerate the basic problems and methods entailed

productive work outside the home should be made to realize the implications of such a policy, from the standpoint of the mental health of the children

2 Holiday homes for whole families are valuable but those which separate pre school children from their parents may do as much harm as good

3 In choosing a foster home for a child, the primary concern should be the emotional atmosphere of the new family and the foster mother's understanding of the child and its problems

4 In institutions and special schools an effort should be made to create a homelike environment and to supply some sort of 'substitute mother' relationship

5 When a child is hospitalized, the mother should be permitted to visit the hospital as frequently as possible, and the hospital staff and health worker should try to help both mother and child through what is a trying emotional experience

6 The welfare of the child should be the determining factor in adoption, and for this reason it is highly desirable that, whenever possible adoption should take place during the first six months of life. The motives of the adoptive parents should be closely investigated, a desire for a sense of fulfilment on the part of both husband and wife is considered the soundest motive

School health School medical officers should be concerned with the mental as well as the physical health of the pupils whom they examine, and they should assist the teachers in creating a school milieu favourable to the present and future mental health of the children

Handicapped children The handicapped child is often a problem referred to public health services. The psychological mutilation which may result from a physical handicap may be more crippling than the physical condition itself. In addition the handicapped child presents a psychological problem for its family. Provided the health worker himself has a satisfactory reaction to physical handicaps he can contribute greatly to successful adjustment of the child and its family

Care of the aged Another special concern of public health services is the care of the aged and infirm. It is important to realize that financial support of the aged is only one of the factors to be considered. It is equally essential to help them achieve and maintain a sense of usefulness to society through suitable social opportunities and some sort of productive activity

Communicable diseases

The fears and stigma which are often associated with communicable diseases and the segregation which the diseases impose give rise to many

SEROLOGY OF SYPHILIS

In the diagnosis of syphilis an essential aim is the standardization of serological techniques at both national and international levels. In accordance with this principle the Subcommittee on Serology and Laboratory Aspects (of the Expert Committee on Venereal Infections) during its second session held in Paris from 23 September to 2 October 1950¹ felt that it should devote the greater part of its work to advising WHO on the problems to be solved in attaining this objective.

New Developments

The need for an international conference on serological techniques—along the general lines laid down by the subcommittee at its first session² and subsequently approved by the Executive Board and by the Third World Health Assembly—now appears in a new light. Developments of a technical nature have taken place which appeared sufficiently important to the subcommittee to justify the postponement of certain decisions. These developments concern the application to the storage of sera of processes capable if the hopes placed in them are realized of considerably simplifying the standardization of serological tests.

During the last year freeze drying techniques have been generally applied for the preparation of the sera used in the standardization of various products and methods. These techniques have not yet been applied to syphilitic sera and consequently there are no grounds for assuming that when subjected to this drying process such sera would retain their serological properties. If such were the case however it would be possible to prepare a collection of syphilitic sera coming from different parts of the world and from both treated and untreated patients representing various levels of reactivity various stages of the disease or different types of false positive or negative reactions. These sera could be used as preliminary standards making it possible to evaluate the respective merits of various serological methods.

The following took part in this session

Members

- A. Harris, Chief Serology Section, Venereal Disease Research Laboratory (US Public Health Service), Communicable Diseases Centre, Chambliss, Georgia, USA (Chairman)
- Dr R. Laport, Chief Service of Serologie Institut Pasteur, Paris, France
- Dr I. N. Orpwood, Principal, Venereal Disease Research Laboratory (Public Health Laboratory Service), St. Peter's Hospital, London, United Kingdom (Vice-Chairman)
- Dr F. Rappaport, Chief of Laboratories, Macclesfield British Hospital, Tel-Aviv, Israel
- Dr K. V. V. K. K. Serology to the German Medical School of Tropical Medicine, Calcutta, India (Reporter)
- Dr T. M. V. Gjesa, Professor of Bacteriology, Gade Institute, University of Bergen, Norway

Secretariat

- Dr F. Krag, Venereal Diseases Section, Laboratory and Serology Aspects, WHO (Secretary)
- Dr T. Guth, Chief Venereal Diseases Section, WHO

The mental hygiene training of public health personnel may be divided into three categories

- 1 In service courses for those already in public health work
- 2 Inclusion of mental hygiene in the basic training of all types of public health personnel, this to aim at giving the worker a broad understanding of human behaviour and, if possible to be incorporated into courses already in the curriculum ,
- 3 Training of specialists in mental hygiene for public health service this to include subjects such as psychiatry, psychiatric social work, clinical psychology, and psychiatric nursing and an intensive study of mental hygiene in its application to public health

The committee emphasized the immediate importance of in service training. Although recognizing that specialist training will probably be considered only in the most advanced countries the committee recommended that WHO should study experiments which are being undertaken in this type of education and convene an expert group at some later date to discuss these experiments

Mental hygiene training is an emotional experience as well as an intellectual process inasmuch as it requires a re evaluation of the health worker's own personal motives and relationships. For this reason it is likely to meet with some initial resistance on the part of public health workers who have had no previous orientation in this aspect of health. Anxiety and ambivalence are characteristic of the early stages of the training. Proper motivation such as that supplied by recognition of a real need for the training can do much to ensure its ultimate success. Other important factors include planning the course in collaboration with those participating in it, adapting the content and the method of teaching to the basic educational level of the group and to the length and conditions of the training, presenting the material at a rate compatible with its emotional acceptance and having the same instructors and making sure that they possess sufficient understanding of public health practice as well as of mental hygiene. If the training is effective those who have taken it will experience a sense of positive emotional gain and a realization that they have acquired new insight into human emotions and behaviour as they occur in their patients and in themselves

(2) establishment in collaboration with the Expert Committee on Biological Standardization of an international standard for each of these two substances

(3) selection of a limited number of laboratories to undertake the chemical and serological control of cardioliipin and lecithin

The subcommittee suggested that WHO support this last activity financially and that the technical staff concerned be strengthened by the allocation of fellowships. One or more of these laboratories should be selected in tropical or subtropical regions.

The control centres in question could also carry out research work in certain very promising fields. For example substances related to cardioliipin in chemical composition have recently been prepared from the tubercle bacillus from certain vegetables and from wheat. A complex phosphatidic acid named sitoliipin has recently been isolated in Finland from wheat embryo. Initial experiments indicate this substance to be suitable for use in the serodiagnosis of syphilis. The subcommittee pointed out that the method of preparation of sitoliipin which is doubtless cheap and easy to obtain, should be published in detail as soon as possible and that samples of the pure substance should be placed at the disposal of the laboratories accustomed to working with cardioliipin so that a comparison of the two substances may be made.

Treponema Studies

The subcommittee noted the value of the co operation established between WHO demonstration teams located in regions where various treponematoses are endemic and the International Treponematoses Laboratory Reference Centre in Baltimore Md USA. The dispatch of information and material in connexion with yaws and bejel for the purpose of applying Nelson's test is leading to progress in these investigations. The specificity of this test should be evaluated as well as the services which it might render in the case of subjects found to be seropositive by the usual tests but not showing any clinical symptoms of syphilis. The subcommittee discussed recent information concerning the culture of virulent treponema and its application to serological and cutaneous diagnostic tests. It will follow this research with interest as well as all efforts to maintain the infecting organism on artificial media.

In view of these new possibilities, the subcommittee suggested that detailed planning and organization of work for the conference be suspended until the question had been settled on the technical level by a pilot study. The plans for this study were established in collaboration with the Expert Committee on Biological Standardization. The aim is to determine whether freeze dried sera are suitable for complement fixation and flocculation tests. The pilot study will be carried out in seven laboratories in different countries, each using a certain number of specified methods and will apply to 12 sera. The general report on the study should be available to the subcommittee within six months.

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Among the other subjects on the agenda of this session were the question of antigens based on cardiolipin and studies on treponema.

Cardiolipin

The subcommittee studied the position as regards the production and use of cardiolipin and lecithin during the past year. Dr Mary Pangborn, who discovered cardiolipin, gave a report on present methods of production and control.

Production of these two reagents has increased to such an extent that they are now sold commercially. However, it is mainly in the hard currency areas that they are available. Manufacture has also been undertaken in a few places outside this area, but the small quantities produced are not sufficient to meet the needs arising from routine use in all laboratories concerned. In the view of the subcommittee, the industrial production of these substances should be encouraged in soft currency areas where, it seems, certain obstacles of a financial and technical nature are impeding production and slowing down experimental work. Furthermore, it is necessary for these new reagents, whose use will become general, to be controlled, and for all necessary guarantees to be obtained as regards the composition of the antigens. The advantages of the cardiolipin lecithin test would be lost if impure products were put on the market or used in the laboratories preparing them without suitable control. The control of cardiolipin and lecithin produced in the USA and in some other countries, which so far has been carried out free of charge by the Division of Laboratories and Research of the New York State Department of Health, is becoming too heavy a burden for this institution. Consequently, bearing in mind the international significance of the use of these substances, the subcommittee suggested certain ways in which WHO might contribute to guaranteeing the purity of the antigen reagents.

(1) inclusion in the *Pharmacopoea Internationalis* of standards for cardiolipin and purified lecithin.

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(3) selection of a limited number of laboratories to undertake the chemical and serological control of cardioli-pin and lecithin

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expenses might be used for more equipment and supplies. In selecting experts for specific assignments WHO should consult the health administrations of the governments concerned and whenever practicable give a choice of names.

Statistics

Vital statistics were discussed in two different contexts: first in considering over population and its effect on employment, food production and standard of living; the committee asked the Regional Director to co-operate with other international agencies which are dealing with this problem and to obtain from the member countries all possible demographic data. Secondly, after stressing the importance of health and vital statistics in appraising the health situation in a country, the committee recommended that the Regional Director study the problem of health statistics in the region and consider the possibility of holding a short training course in Ceylon in 1951.

Training of Medical and Related Personnel

Self support in terms of making full use of facilities within the region and expanding and improving these facilities was emphasized as the best means of training the medical and related personnel needed in South East Asia. The committee recommended as a temporary measure the training of medical assistants who would work under the supervision of fully qualified doctors. The governments of the countries in the region were urged to promote the expansion of training facilities for nurses and to improve the status and working conditions of nursing personnel. Attention was also given to the training of sanitarians and it was recommended that there be uniformity in such training with regard to basic educational qualifications, syllabus and period of training.

FIG 5 WHO REGIONAL COMMITTEE FOR SOUTH EAST ASIA
THIRD SESSION—II



Ph. R. C. Gil. Lond.
Mr. A. ng San (Daw Khin Kyi) Cha man

Environmental Sanitation and Nutrition

Environmental sanitation and nutrition were considered problems of particular importance to the region. Member countries were urged to

REGIONAL COMMITTEE FOR SOUTH-EAST ASIA

The third session of the WHO Regional Committee for South East Asia took place in late September at Kandy, Ceylon. At the opening meeting representatives of the eight countries of the region were addressed by Mr S W R D Bandaranaike, Minister of Health and Local Government of Ceylon. A new Member State, Indonesia, was welcomed. The committee elected Mrs Aung San (Daw Khin Kyi), Director of Women and Children's Welfare of Burma, as Chairman of the session and Dr Faqr Mohamed, Director of Health Service of Afghanistan, as Vice Chairman.

FIG 4 WHO REGIONAL COMMITTEE FOR SOUTH EAST ASIA THIRD SESSION—I



Mr S W R D Bandaranaike, Minister of Health, Ceylon, shown addressing the opening session.

Organizational Problems

Organization and management matters were among the first considerations at the meetings. The committee recommended that national health administrations set up separate sections with senior officers in charge to deal with international health matters. Co-ordination of health projects assisted by the United Nations, its specialized agencies, and other bodies was also the subject of a recommendation, the Regional Director being requested to draw up plans for such co-ordination within the region and to report on the progress achieved. It was decided that projects undertaken with WHO assistance should make use of the qualified personnel available within the recipient country and that the number of foreign members of teams should be kept to a minimum. The money thus saved on personnel

assistance The Regional Director was requested to assist governments by arranging for the loan of services of medical officers teachers and lecturers for medical and nursing training organizing conferences and courses for study of relevant subjects providing fellowships and furthering research on problems relative to maternal and child health He is also to aid in the initiation and carrying out of school medical programmes

Disease Control

In studying disease control measures for the region the committee gave particular attention to smallpox which still causes heavy morbidity and mortality in South East Asia Every country was urged to intensify efforts to ensure vaccination and revaccination of its population The preparation and use of dried vaccine was considered Indonesia has been working successfully with this vaccine and India has been doing some experimental work on it The committee urged the Regional Director to select a suitable member country and to assist its government in a nation wide campaign for the eradication of smallpox

It was decided that only in special circumstances should the existing joint UNICEF/WHO malaria projects be continued beyond the stipulated two year period These projects are to be turned over to national health administrations as soon as possible

Discussion of venereal disease control in the region centred largely on two questions (1) the desirability of having a uniform serological test procedure for all countries and (2) control of venereal diseases at seaports The Regional Director was asked to nominate an experienced laboratory worker with whom the Regional Office could consult regarding problems of serological diagnosis Member countries were asked to adhere to the Brussels Agreement concerning treatment centres for seafarers and it was recommended that a demonstration venereal disease-control project be undertaken at the port of Colombo Ceylon

Programme and Budget

The 1951 programme for South East Asia includes the establishment of a health demonstration area The committee decided that if necessary conditions were fulfilled Ceylon should be considered as the site for this project Two other areas may be selected for a joint programme with *FAO to control malaria develop general health services and increase food production* An FAO team is already in the field studying the agricultural potentialities of a likely site

The 1952 budget proposed for the region amounts to \$8 500 000 this sum includes an increase intended for expenditure on field operations

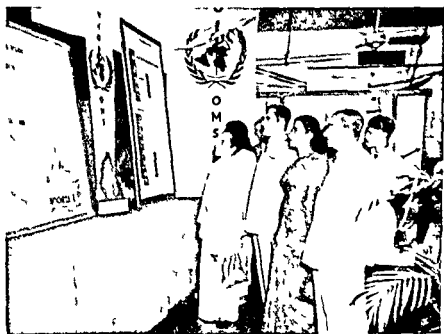
The next session of the Regional Committee for South East Asia will be held in Rangoon Burma

take immediate steps to improve sanitary conditions and the Regional Director was asked to assist by encouraging the United Nations Technical Assistance Board to consider favourably requests from governments for aid in improving environmental sanitation, by promoting the establishment of public health engineering sections in national health administrations, and by exploring the possibilities of initiating small pilot projects in environmental sanitation preferably in conjunction with WHO demonstration team activities. With regard to nutrition, it was decided that the problems of the region should be studied at an international training course to be held at the All India Institute of Hygiene and Public Health Calcutta, in 1951, under the joint auspices of the Government of India, the Food and Agriculture Organization (FAO), and WHO.

Maternal and Child Health

Maternal and child health activities were stressed as a most important method of introducing better standards of living into relatively less developed areas. As part of the WHO programme the Regional Committee

FIG 6 WHO REGIONAL COMMITTEE FOR SOUTH EAST ASIA THIRD SESSION—III



Delegates at the opening of a health exhibit arranged by the Government of Ceylon
Mrs Aung San (Daw Khin Kyi) at extreme left

for South East Asia recommended that (1) increased attention be paid to paediatrics (2) hospital facilities be provided for children (3) modern midwifery services be developed with particular emphasis on domiciliary service in rural areas and (4) full use be made of available international

Acting on the recommendations of a subcommittee on programme which was established to consider activities for 1951 and 1952 the committee

1 urged Member States to make adequate provisions in their national budgets for public health services and for the training of necessary personnel

2 expressed the opinion that short term consultants should be appointed only for special purposes and that regional advisers should spend sufficient time in the countries which they serve to enable them to accomplish their tasks satisfactorily

3 recommended that regional advisers on environmental sanitation and on malaria be appointed that the BCG vaccination campaign be continued and that the problem of rehabilitation of tuberculous patients also be considered an integral part of a comprehensive tuberculosis campaign that an intra regional training programme for venereal disease control be undertaken and countries in the region encouraged to develop research on treponematosi

4 noted provisions made for activities relative to typhus and relapsing fever bilharziasis cholera rabies leprosy nutrition maternal and child health and mental health

5 requested the Regional Director to explore the possibility of convening a regional seminar on trachoma and to develop an intra regional and inter regional fellowship scheme for training personnel to deal with this disease to stimulate research on the epidemiology of leishmaniasis and include complementary programmes for leishmaniasis control in those of malaria demonstration teams operating in areas where the former disease is prevalent

6 called upon member countries to develop an effective school health service and health programme for school age children to improve their smallpox vaccination services where necessary and to give attention to pertussis making its notification compulsory and developing the treatment with antibiotics The Regional Director was requested to study further the value of mass vaccination against pertussis

FIG 8 WHO REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN THIRD SESSION—II

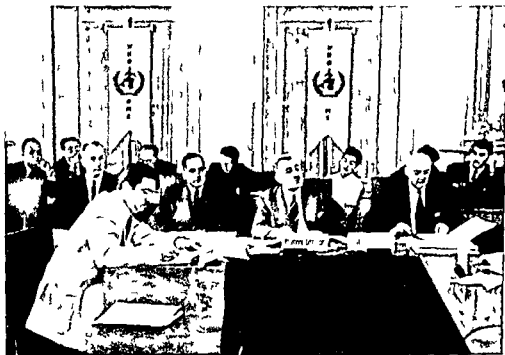


Mr H. Bahar Minister of Health of East Bengal Pakistan

REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN

The Regional Committee for the Eastern Mediterranean met for its third session from 4 to 7 September 1950 in Istanbul Turkey. It was attended by representatives from Egypt, Ethiopia, France, Iran, Iraq, Israel, the Lebanon, Pakistan, Saudi Arabia, Syria, Turkey, and the United Kingdom. Dr N. Karabuda (Turkey) was elected Chairman and Drs J. S. Saleh (Iran) and B. Al Roumy (Saudi Arabia) Vice Chairmen. Dr S. Hayek (Lebanon) served as Rapporteur. At the opening session, an address of welcome was given by Dr N. R. Belger, Minister of Health of Turkey.

FIG 7. WHO REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN
THIRD SESSION—I



Left to right: Médecin Colonel J. Helfft (Vice Chairman), Lt Col. M. Jafar (Chairman), Sir Aly T. Shousha Pasha (Regional Director), Dr A. Machiavello (WHO).

The committee reviewed the action taken on decisions reached at its second session, the resolutions of the Third World Health Assembly which were of particular interest to the region, and the reports of the representatives on their national health problems and on international health activities.

These overall conclusions are drawn from a study based on figures obtained from many countries and published by Dr M Pascua Deputy Director Health Statistics Division WHO in the *Epidemiological and Vital Statistics Report*² However these figures are incomplete either because information for 1949 is still lacking because it cannot be obtained or because the figures do not exist as is the case for vast regions

Natality

Analysis of the data concerning the various continents shows that "figures for crude birth rates are still decidedly higher on the whole than those registered during the year immediately preceding World War II

Some examples taken from the list of countries mentioned in this study will give an idea of the birth rates in various parts of the world in 1949 The birth rate in the Union of South Africa is 26.7 per 1 000 inhabitants (white race only) in Canada 26.9 (20.6 in 1938) in Chile 33.2 in the USA 24.1 (about 18.0 in 1938) in Mexico 45.4 in Ceylon 39.9 in Israel (Jewish population only) 29.3 (26.1 in 1948) in Japan 33.4 (27.1 in 1938) in the Indian Union 26.4—a rate slightly higher than that in 1948 In Germany (German Federal Republic) the birth rate has oscillated around 16.5 in the postwar years in England and Wales the rate in 1949 was 16.7 (15.1 in 1938) in Spain 21.2 in France 20.6 (14.6 in 1938) in Italy 20.0 (23.7 in 1938) in Portugal 25.0 in Sweden 17.4 (14.9 in 1938) in Switzerland 18.4 (15.2 in 1938) In Australia (full blooded aborigines not included) the birth rate rose to 22.9—a higher figure than for 1938

General mortality

General mortality rates in the countries mentioned above have been as follows Union of South Africa (white race only) 9.2 per 1 000 inhabitants Canada 9.2 (the rate has been more or less stabilized around this figure for several years) Chile 18.1 (23.5 in 1938) the USA 9.7 (10.6 in 1938) Mexico 17.9 (16.3 in 1948) Ceylon 12.6 Israel (Jewish population) 6.9 Japan 11.6 (17.7 in 1938) Indian Union 15.6 (23.7 in 1938) Germany (German Federal Republic) 10.1 (11.7 in 1938 for the whole of the Reich) England and Wales 11.7 (11.6 in 1938) Spain 11.3 France 13.5 (15.4 in 1938) Italy 10.4 (14.1 in 1938) Portugal 13.8 Sweden 9.9 (11.5 in 1938) Switzerland 10.7 (11.6 in 1938) Australia (full blooded aborigines not included) 9.5

Infant mortality

Infant mortality for 1949 varied very little in the countries referred to in the article As pointed out by the author some countries have attained

The committee authorized the Regional Director to act on its behalf in matters pertaining to the United Nations Technical Assistance Programme and urged the countries of the region to co operate closely with the Regional

FIG 9 WHO REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN THIRD SESSION—III



Left to right Dr J Oren (Israel) and Dr A H Toochl (Iraq)

Office concerning requests and projects relating to the health aspects of the programme

Epidemiological problems of the region were considered in some detail. The committee recommended that member countries conclude bilateral or multilateral sanitary agreements with neighbouring countries to aid in controlling diseases prevalent in the region. Uniformity in methods of reporting epidemiological information was also recommended and the Regional Director was requested to ask the health authorities of Iran, Pakistan and Turkey to adhere to the Epidemiological Intelligence Service of the Eastern Mediterranean.

The fourth session of the committee will be held in Teheran, Iran, in September 1951.

NATALITY, GENERAL MORTALITY, AND INFANT MORTALITY IN 1949

Comparison of 1949 figures with those of 1948 gives the impression that there has been a slight drop in the birth rate in a large number of countries. On the other hand, the crude death rate from all causes was a little higher in 1949 than in 1948. Infant mortality has varied very little in most of the countries concerning which information is available.

has a wide knowledge of the health problems of the African continent. He also served as head of the WHO mission in Ethiopia. Before joining WHO he was Deputy Chief of Staff of the Netherlands Military Government and later Director General of Medical Services for the Royal Netherlands Army with the rank of Lieutenant General.

The WHO Office for Africa will be located in Geneva pending the establishment of a permanent Regional Organization for Africa. Three such organizations have already been set up for South East Asia in New Delhi for the Eastern Mediterranean in Alexandria and for the Americas at the Pan American Sanitary Bureau Washington. In addition there is a Temporary Office for the Western Pacific in Hongkong and a WHO Office for Europe located at Headquarters in Geneva.

Public Health Nursing Programme in Costa Rica

The Ministry of Public Health of Costa Rica and the Pan American Sanitary Bureau (PASB) have signed an agreement which will initiate a public health nursing programme. This programme has as objectives the development of a general modern public health nursing service the promotion of in service education for the regular nursing staff of the Department of Health and the addition of a course in public health nursing to the curriculum of the school of nursing of the San Juan de Dios Hospital. In accordance with the agreement signed the PASB will provide the services of (1) a public health nursing consultant to the Department of Health to prepare and recommend detailed plans for the programme (2) a nursing education consultant to assist in the revision of the curriculum of the school of nursing mentioned above and (3) a public health nurse to carry out the plans of the consultants.

FIG 10 AGREEMENT SIGNED BETWEEN TURKEY AND WHO



Left to right standing: Dr M. Becker of the WHO tuberculosis centre, D. A. A. I. Director General of Health Ministry of Health and Social Welfare and D. N. Kasaboglu Deputy Under Secretary Ministry of Health and Social Welfare seated: Dr E. Berthel WHO tuberculosis consultant Dr E. H. Hustonagh Minister of Health and Social Welfare and Dr E. Tok Ude Secretary of State Ministry of Health and Social Welfare

a rate of 30 per 1,000 live births per year, and even lower. Thus in Southern Rhodesia the infant mortality rate is 29 per 1,000 (for white children), in the USA it is 31, in England and Wales, 32, in the Netherlands, 27, in Sweden, 23—this last being the lowest ever recorded in Europe. Progress in demography in these countries must necessarily be slow, 'a great proportion of the infant deaths now occurring in them being dependent on congenital factors, prematurity and other conditions related to the neonatal period whose correction cannot now be expected to be so direct, rapid and efficient as the reduction in mortality achieved in other phases of infancy has been in past decades.

On the other hand, in certain countries the infant mortality rate is still high. In Chile the annual rate since 1946 is about 160, in Egypt it is about 170, in Hungary about 100, in Portugal, it was 115 for the whole of the year 1949, in Czechoslovakia it will be about 83. In the Indian Union the 1948 rate was 131. In these countries the annual fluctuations are appreciable and a reduction in infant mortality could be brought about fairly quickly if a marked improvement in living conditions could be achieved.

Notes and News

Leprosy Consultant Visits Peru

Dr Lauro de Souza Lima, Pan American Sanitary Bureau consultant, recently visited Peru as part of his survey of South American countries. There are an estimated 3,000 persons afflicted with leprosy in Peru. 1,137 cases were registered in 1949. The disease seems to be endemic in the north-east region of the country where 80% of the cases are found. It shows a slow but continuous progress; the nodular forms are especially prevalent (76% of incidence).

Peru has a Department of Leprosy which, with sufficient financial resources, hopes to be able to develop a control programme against the disease. Plans have been made and a considerable amount of money allocated for a model leprosarium to be constructed in the Department of Loreto, in the eastern part of Peru. Consideration is also being given to co-operative control activities with neighbouring countries—Bolivia, Brazil, Colombia and Ecuador. It has been suggested that a meeting of technicians on leprosy be held under the auspices of the Bureau to examine the bases for such co-operative action.

Chief of WHO Office for Africa Appointed

Dr François Daubenton, Public Health Consultant to the Regional Office for the Eastern Mediterranean, has been named Chief of the newly created WHO Office for Africa. Dr Daubenton, who spent more than twenty years in Africa as chief medical officer of a large Witwatersrand gold mining group and in various public health posts

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Left to right, standing: Dr M Berke of the WHO anti-tuberculosis centre, Dr A. Ant. Director General of Health Ministry of Health and Social Welfare and Dr N. Kaab. Seated: Deputy Under Secretary Ministry of Health and Social Welfare, seated: Dr E. Bernhet, WHO tuberculosis consultant, Dr E. H. Hustu, Deputy Minister of Health and Social Welfare, and Dr E. Tok. Under Secretary of State Ministry of Health and Social Welfare.

WHO and Turkey Sign Agreement

The Government of Turkey and WHO have signed a general agreement defining terms and conditions under which the Organization will render services in Turkey conferring immunities and privileges on WHO staff working there, in accordance with the Convention on Immunities and Privileges for Specialized Agencies of the United Nations as accepted by the General Assembly. Signatories of the agreement were Dr E. H. Ustundag, Minister of Health of Turkey and Dr A. H. Tewfik Suredi, Director of the WHO Regional Office for the Eastern Mediterranean. Also present were Dr E. Tok, Under Secretary of State for Health, his Deputy Dr N. ... and Dr E. Berthet, head of the WHO Tuberculosis Control Demonstration and Training Centre at Istanbul.

Dr Berthet was also received by the President of the Turkish Republic, M. C. ... who expressed his satisfaction with the work being carried out by WHO in Turkey. Of particular interest is the Tuberculosis Control Demonstration and Training Centre which will shortly move into a new modern building being provided by the Turkish Government and the Antituberculosis League of Istanbul.

Seminar on Environmental Sanitation

The Government of the Netherlands, the International Health Division of the Rockefeller Foundation and WHO sponsored a seminar on environmental sanitation from 27 November to 2 December. Forty specialists from 16 European countries met at The Hague to discuss sanitary engineering problems and their relation to public health.

On the agenda were topics relating to the engineering control of man's environment. Special attention was given to the subject of training and utilization of sanitary engineers.

The seminar was opened by Dr C. van den Berg, Director General for International Health Affairs, Ministry of Social Affairs, the Netherlands, and Professor H. G. Buisson, Sanitary Engineering Consultant of the WHO Special Office for Europe. Dr W. F. J. M. Krul, Professor of Sanitary Engineering, Technical High School, Delft and Director of the Institute for Water Supply of the Netherlands Government, acted as Chairman.

Tropical Disease Symposium for Middle East

A Middle East medical symposium on the prophylactic and therapeutic aspects of tropical diseases was held at the American University in Beirut, Lebanon, on 18 and 19 November. This symposium, sponsored by the United Nations Relief and Works Agency for Palestine Refugees (UNRWAP/UNRWA), the US Navy Medical Research Unit, Cairo, and WHO, was attended by nearly 500 physicians and public health workers.

Among the speakers were Dr J. J. Saper, Surgeon Commander, US Navy Medical Research Unit, Cairo; Dr M. Farid, WHO malarialogist attached to UNRWAP/UNRWA; and Mr J. Arbuthnot, sanitary engineer with UNRWAP/UNRWA. Drs N. J. Conant and H. Gezon of the American University of Beirut; Drs J. M. Weir and G. Hayes of the Rockefeller Foundation; Drs M. A. Azim Bey and F. R. Hassan of the Egyptian Ministry of Public Health; and WHO staff members—Drs F. W. Reynolds and F. A. Soliman, Chief of Field Operations of the Venereal Disease Section, Headquarters and Venereal Disease Adviser at the Eastern Mediterranean Regional Office respectively; Dr I. H. Hudson, Chief Medical Adviser to the Leprosy and Syphilis Control Project in Iraq; Dr I. W. Clements, Chief of the Nutrition Section, Headquarters, Office of the Medical Officer in Charge of the Tuberculosis Control and Training Centre, Istanbul; and Mr R. L. Bogue, public health officer attached to the anti-venereal disease demonstration project at Tanta, Egypt.

FIG 11 TROPICAL DISEASE SYMPOSIUM



The subjects discussed included malaria treponemal diseases tuberculosis bilharzias intestinal diseases environmental sanitation maternal and child health and health education. A highlight of the symposium was the announcement made by Dr H. H. Anderson, Dean of the Medical Faculty of the American University of Beirut, of the discovery of a new antibiotic, fumigillin, which is believed to be effective against *Entamoeba histolytica*. This antibiotic—still in the experimental stage—may have great value in the treatment of amoebic dysentery, a disease widespread in the Middle East.

Iran Abolishes Customs Duties on Insecticides and Drugs

At the meeting of the WHO Regional Committee for the Eastern Mediterranean held in September¹ Iran's Health Minister, Dr J. S. Saleh, announced that the Persian Parliament had abolished customs duties on insecticides and on certain vital drugs—quinine, atabrine, paludrine and other antimalarials, all antibiotics, and bismuth and arsenical compounds used in the treatment of venereal disease. Dr Saleh urged other WHO Member States to follow the example of his government and make such essential materials available to their people at lower cost.

Bilharziasis Survey in Middle East

A survey of the existence and spread of bilharziasis in the Middle East is being conducted by Dr M. Abdel Azim Bey, Director General of the Rural Hygiene Department, Ministry of Public Health, Egypt, who has been loaned to WHO for this assignment. The investigation was started in the Gezira district in the border area of Syria and Turkey between the Euphrates and Tigris rivers. From there Dr Azim Bey will proceed to Jordan, Iraq and Saudi Arabia.

Bilharziasis is found in the Middle East chiefly in areas with small streams or irrigation ditches which provide habitation for snails. Attention will be focussed on such the survey. Dr Azim Bey will be able to draw upon experience in Egypt where the disease has been the subject of considerable study and public health action.

Upon completion of the survey Dr Azim Bey will make a report to Dr Aly T Shousha Pasha, Director of the WHO Regional Office for the Eastern Mediterranean, following which the governments concerned will be informed of the results and the report placed before the next meeting of the Regional Committee for the Eastern Mediterranean.

Views on WHO

Eradication of Venereal Diseases *

With reference to the venereal disease control programme in Haiti the *Lancet* London (1950 1 772) comments:

"That endemic diseases can be speedily eliminated has been shown by the eradication of malaria from areas and even (as in the case of Cyprus) whole countries. An eradication attempt of a different sort—more ambitious because its aim is to remove the source of infection in man rather than eliminate an insect vector—is to be made in Haiti where penicillin is to be applied to the extinction of venereal disease. In this island republic about 25% of the 3½ million population are said to have venereal disease and some 85% have yaws which it is hoped to eradicate at the same time. Ten mobile units will tour the island giving injections of penicillin to all inhabitants. The campaign which is being undertaken by the World Health Organisation along with the government of Haiti and the United Nations International Children's Emergency Fund is expected to take two years to complete.

This bold undertaking will be watched with close attention for if the attempt succeeds here it may also succeed elsewhere. Much will depend on convincing populations that the effort is worth making."

Antimalarial Drugs

In connection with the third report of the WHO Expert Committee on Malaria the *Lancet* London (1950 2 297) comments:

It is not surprising that WHO's expert committee on malaria finds that no existing antimalarial drug has all the desired qualities. Their ideal drug would be a causal prophylactic against all species of human malaria parasites, would have a definite curative value and low toxicity and would be cheap. If such a product has not yet been produced, one must remember that different geographical strains of malaria parasites differ in their reactions to both prophylaxis and therapy and that the degree of premunition of the host may affect their action. The efficacy of specific drugs is by no means the same everywhere.

As the committee say the treatment of malaria is firmly connected in the public mind with the use of quinine and for malarial emergencies injections of quinine are still generally recommended. The evidence they adduce in favour of their opinion that certain synthetic drugs may possibly be equally effective for this

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